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OM nucleic - nucleic search, using sw model

Run on: February 20, 2002, 20:40:31 ; Search time 1476.91 Seconds
(without alignments)
4858.978 Million cell updates/sec

Title: US-08-836-455-1

Perfect score: 435
Sequence: 1 ATGGGGGGCCCTGCTCAGAT.....CACCATCAGTAAGCTTGGG 435

Scoring table: OLIGO_NUC
Gapop 60.0 , Gapext 60.0

Searched: 1472140 seqs, 8248589755 residues

Word size : 0

Total number of hits satisfying chosen parameters: 2944280

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Listing first 45 summaries

Database :

GenEmbl: *
1: gb_ba: *
2: gb_htg: *
3: gb_in: *
4: gb_om: *
5: gb_ov: *
6: gb_pat: *
7: gb_ph: *
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9: gb_pr: *
10: gb_ro: *
11: gb_scs: *
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13: gb_un: *
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16: em_fun: *
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18: em_in: *
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23: em_ph: *
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25: em_ro: *
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29: em_vi: *
30: em_htgo_hum: *
31: em_htgo_inv: *
32: em_htgo_rod: *
33: em_htg_hum: *
34: em_htg_inv: *
35: em_htg_rod: *
36: em_htg_other: *

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB	ID	Description
1	377	86.7	381	10	AF124721	AF124721 Mus muscu
2	117	26.9	321	10	AF163749	AF163749 Mus muscu
3	108	24.8	303	10	MUSIGLAF	M36246 Mouse Ig ka
4	107	24.6	302	10	MUSIGLAF	M55588 Mus muscu
5	100	23.0	273	10	MMU21066	U21066 Mus muscu
6	100	23.0	276	6	AR026090	AR026090 Sequence
7	100	23.0	275	6	AR026094	AR026094 Sequence
8	100	23.0	279	10	MMVKNRBI1	X63811 M.musculus
9	100	23.0	283	10	AF144956	AF144956 Mus muscu
10	100	23.0	285	10	MMU29617	U29617 Mus muscu
11	100	23.0	324	6	103643	I03643 Sequence 4
12	100	23.0	324	6	107835	I07835 Sequence 4
13	100	23.0	381	10	AF045495	AF045495 Mus muscu
14	100	23.0	381	10	AF045508	AF045508 Mus muscu
15	100	23.0	443	10	MMU08675	U86675 Mus muscu
16	100	23.0	684	10	MUSIGKAC1	J00565 Mouse Ig ka
17	100	23.0	685	10	MMIGK7	V00808 Part of the
18	99	22.8	390	10	MUSIKCC	L41880 Mus muscu
19	97	22.3	640	10	MMU242670	AJ742670 Mus muscu
20	91	20.9	456	10	MUSIGKCNK	M19914 Mouse Ig re
21	90	20.7	438	6	I32991	I32991 Sequence 45
22	90	20.7	438	22	E09035	E09035 cDNA encodi
23	89	20.5	321	10	MUSIGKAA3	M59920 Mouse Ig ge
24	89	20.5	324	10	MUSX	L48667 Mus muscu
25	88	20.5	381	10	AF045510	AF045510 Mus muscu
26	88	20.2	290	10	AF144902	AF144902 Mus muscu
27	86	19.8	308	10	AF139248	AF139248 Mus muscu
28	86	19.8	618	10	MUSIGLAPA	D29668 Mouse mRNA
29	85	19.5	423	10	MMU39902	U39902 Mus muscu
30	85	19.5	438	10	MMU39903	U39903 Mus muscu
31	85	19.5	471	10	MMU24115	U24115 Mus muscu
32	85	19.5	593	10	MMIGM65A	X57856 M.musculus
33	85	19.5	642	6	AR030520	AR030520 Sequence
34	85	19.5	642	6	AR105241	AR105241 Sequence
35	85	19.5	642	10	MMU28969	U28969 Mus muscu
36	85	19.5	681	10	MMIG936L	Z48768 M.musculus
37	85	19.5	943	10	MMIGK9	V00810 M.musculus
38	85	19.5	943	10	MUSIGKAJ	J00560 Mouse Ig ka
39	85	19.5	1101	10	MMU68543	U68543 Mus muscu
40	84	19.3	360	10	AF029237	AF029237 Mus muscu
41	84	19.3	639	6	I07388	I07388 Sequence 3
42	84	19.3	645	10	AB048528	AB048528 Mus muscu
43	83	19.1	300	10	AF137626	AF137626 Mus muscu
44	83	19.1	306	10	MUSIGKAF	M64168 Mus muscu
45	83	19.1	436	10	MMU012556	AJ012556 Mus muscu

ALIGNMENTS

RESULT	1	LOCUS	AF124721	381 bp	mRNA	ROD	22-MAY-2001
DEFINITION		Mus musculus			immunoglobulin light chain mRNA, partial cds.		
ACCESSION		AF124721					
VERSION		AF124721.1			GI:14164546		
KEYWORDS							
SOURCE		house mouse.					
ORGANISM		Mus musculus					
REFERENCE							
AUTHORS		Tripathi, P.K., Qin, H., Bhattacharya-Chatterjee, M., Ceriani, R.L., Foon, K.A. and Chatterjee, S.K.					
TITLE		Construction and characterization of a chimeric fusion protein consisting of an anti-idiotypic antibody mimicking a breast cancer-associated antigen and the cytokine GM-CSF					
JOURNAL		Hybridoma 18 (2), 193-202 (1999)					
MEDLINE		99306687					
PUBMED		10380019					

REFERENCE 2 (bases 1 to 381)
AUTHORS Chatterjee, S.K. and Tripathi, P.K.
TITLE Direct Submission
JOURNAL Submitted (29-JAN-1999) Internal Medicine, University of Kentucky,
800 Rose Street, Lexington, KY 40536, USA
FEATURES
SOURCE 1.381
/organism="Mus musculus"
/strain="BALB/c"
/db_xref="taxon:10090"
CDS
1..>381
/note="anti-idiotypic antibody 11D10; mimics a breast
cancer-associated antigen, human fat globule (HMF3)"
/codon_start=1
/product="immunoglobulin light chain"
/protein_id="AAK55120.1"
/db_xref="GI:14164547"
/translation="MRAPQILIFLLIPGRDIOQMTPSSISASLGORVSLTK
ASQDGLNHLQDEPDGTRKLIYATSLSGVFKRSGSRSGSDYSLTISLESD
FVAYICLYASSPYRFGGGRKLEIK"
BASE COUNT 90 a 93 c 89 g 109 t
ORIGIN
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Best Local Similarity 100.0%; Pred. No. 3.9e-218;
Matches 377; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
2Y 5 GGGCCCCGCTCAGATTCCTGGTCTCTGCTCTGTTCCAGGTACCAATGAGAA 64
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5 GGGCCCCGCTCAGATTCCTGGTCTCTGCTCTGTTCCAGGTACCAATGAGAA 64
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65 TCAGATGACCCAGTCTCCATCCTTATCTGCTCTGAGGAGAAAGTCACTCA 124
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65 TCAGATGACCCAGTCTCCATCCTTATCTGCTCTGAGGAGAAAGTCACTCA 124
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65 TCAGATGACCCAGTCTCCATCCTTATCTGCTCTGAGGAGAAAGTCACTCA 124
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125 CTTCGCGGCAAGTACGAGCATTTGATTAATTAATGCTTACGAGAACAGATG 184
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185 GAATATTAAGGCTGATCTAGGCGACATCCAGTTAGGCTCTGGTCCCAAAAGT 244
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185 GAATATTAAGGCTGATCTAGGCGACATCCAGTTAGGCTCTGGTCCCAAAAGT 244
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245 TCAGTGGAGTAGTCTGGGTCAGATTAATCTCAGCATCAGACCTTGGTGAAG 304
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245 TCAGTGGAGTAGTCTGGGTCAGATTAATCTCAGCATCAGACCTTGGTGAAG 304
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305 ATTTGTAGCCATTACTGCTACAAATATGCTAGTTCCGTTACGCTGGAGGGGGA 364
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305 ATTTGTAGCCATTACTGCTACAAATATGCTAGTTCCGTTACGCTGGAGGGGGA 364
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365 CCAGCTGGAATAAATAA 381
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365 CCAGCTGGAATAAATAA 381
Db
RESULT 2
AF163749 321 bp mRNA ROD 20-JUL-2001
LOCUS Mus musculus mab 49.8.9 immunoglobulin light chain variable region
DEFINITION mRNA, partial cds.
ACCESSION AF163749
VERSION AF163749.1 GI:5690304
KEYWORDS house mouse,
SOURCE Mus musculus
ORGANISM Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Euthera; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
REFERENCE 1 (bases 1 to 321)
AUTHORS Mertens, N.M., Galvin, J.E., Adderson, E.E. and Cunningham, M.W.
TITLE Molecular analysis of cross-reactive anti-myosin/anti-streptococcal
mouse monoclonal antibodies

JOURNAL Mol. Immunol. 37 (15), 901-913 (2000)
MEDLINE 21179651
PUBMED 11282394
REFERENCE 2 (bases 1 to 321)
AUTHORS Mertens, N.M. and Cunningham, M.W.
TITLE Direct Submission
JOURNAL Submitted (03-JUN-1999) Microbiology and Immunology, Oklahoma
University Health Sciences Center, 940 St. Young Blvd, Oklahoma
City, OK 73190, USA
FEATURES
SOURCE 1.321
/organism="Mus musculus"
/strain="BALB/c"
/db_xref="taxon:10090"
/note="mab 49.8.9"
CDS
1..>321
/note="V-J segments"
/codon_start=1
/product="immunoglobulin light chain variable region"
/protein_id="AAD47028.1"
/db_xref="GI:5690305"
/translation="DIQMTQSPSSLSASIGRRVSLTKRASQDGLSGLNQDEPDT
KRLIYATSLDGVFKRSGSRSGSDYSLTISLESDFDYICLYASSPYRFGGR
KLEIK"
BASE COUNT 84 a 77 c 75 g 85 t
ORIGIN
Query Match 26.9%; Score 117; DB 10; Length 321;
Best Local Similarity 99.1%; Pred. No. 1.2e-59;
Matches 217; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 163 TGGCTTCAGCAGAACCCAGATGAACTTAATACCGCTGATACGACATCCAGTTA 222
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Db 103 TGGCTTCAGCAGAACCCAGATGAACTTAATACCGCTGATACGACATCCAGTTA 162
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QY 223 GGTCTGTGTTCCCAAAAGTTTCAGTGGCAGTCTGGGTCAAGTATTCCTCAC 282
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Db 163 GATCTGTGTTCCCAAAAGTTTCAGTGGCAGTCTGGGTCAAGTATTCCTCAC 222
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QY 283 ATACACAGCCTTGATCTGAGATTTTGTAGCCTTATCTGCTCAATATGCTAGTCT 342
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Db 223 ATACACAGCCTTGATCTGAGATTTTGTAGCCTTATCTGCTCAATATGCTAGTCT 282
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QY 343 CCGTACAGCTTCGGAGGGGGGACCAAGCTGGAATAAATAA 381
|||||
Db 283 CCGTACAGCTTCGGAGGGGGGACCAAGCTGGAATAAATAA 321
|||||
RESULT 3
MUSIGLAF 303 bp mRNA ROD 27-APR-1993
LOCUS Mouse Ig kappa-chain mRNA V region, partial cds, from hybridoma
DEFINITION H220-23.
ACCESSION M36246
VERSION M36246.1 GI:197631
KEYWORDS V-region; immunoglobulin kappa-chain; immunoglobulin light chain;
processed gene.
SOURCE Mouse (strain BALB/c), cDNA to mRNA, from hybridoma H220-23.
ORGANISM Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Euthera; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
REFERENCE 1 (bases 1 to 303)
AUTHORS Kavalier, J., Caton, A.J., Staudt, L.M., Schwartz, D. and Gerhard, W.
TITLE A set of closely related antibodies dominates the primary antibody
response to the antigenic site CB of the A/PR/8/34 influenza virus
hemagglutinin
JOURNAL J. Immunol. 145, 2312-2321 (1990)
MEDLINE 90375932
COMMENT Draft entry and computer-readable sequence for [J. Immunol. (1990)
in press] kindly submitted
by J.Kavalier, 06-JUL-1990.
FEATURES Location/Qualifiers

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source
1. .303
/organism="Mus musculus"
/strain="BALB/c"
/sub_species="domesticus"
/db_xref="taxon:10090"
/cell_line="H220-23"
/tissue_type="hybridoma"
/map_chromosome="6"
1. .303
/gene="IgM"
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/gene="IgM"
/codon_start=1
/product="immunoglobulin kappa-chain Vκ-1"
/protein_id="AAA39105.1"
/db_xref="GI:197632"
/translation="SPSSLSASIGERSVLTICRASODIGSSLMWLOQEPDGTIKRLIYA
TSLSDSGVPRKRSRSGSDYSITISLSEDFVYVCQIYASSPYTFGGTKLKIK"
BASE COUNT      78 a      71 c      70 g      83 t      1 others
ORIGIN

Query Match      24.8%; Score 108; DB 10; Length 303;
Best Local Similarity 99.0%; Pred. No. 3.8e-54;
Matches 208; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 163 TGGCTTCAGCAGACAGACAGTGAAGTATTAACGCGCTGATCTACGCCACATCCAGTTTA 222
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DB 85 TGGCTTCAGCAGACAGACAGTGAAGTATTAACGCGCTGATCTACGCCACATCCAGTTTA 144

QY 223 GGTTCGTGGTGTCCCAAAAGGTTGAGTGAGTGTGCGGTGATTTCTCTCACC 282
      |||||||
DB 145 GATTCTGGTGTCCCAAAAGGTTGAGTGAGTGTGCGGTGATTTCTCTCACC 204

QY 283 ATCAGCAGCCTTGAGTGTGAAGATTTGTAGCCTATTACTGTACAAATATGCTAGTTCT 342
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DB 205 ATCAGCAGCCTTGAGTGTGAAGATTTGTAGCCTATTACTGTACAAATATGCTAGTTCT 264

QY 343 CCGTACACGTTTCGAGGGGGGACCAAGCTG 372
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DB 265 CCGTACACGTTTCGAGGGGGGACCAAGCTG 294

RESULT 4
MMU55588      302 bp      mRNA      ROD      05-MAR-1997
LOCUS      Mus musculus anti-DNA immunoglobulin light chain Igc, antibody
DEFINITION
ACCESSION      U55588
VERSION      U55588.1 GI:1870291
KEYWORDS
SOURCE      house mouse.
ORGANISM      Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
1 (bases 1 to 302)
AUTHORS      Krishnan,M.R., Jou,N.-T. and Marion,T.N.
TITLE      Correlation between somatically derived VH-CDR3 structures and
JOURNAL      specificity for DNA among autoimmune antibodies to DNA
REFERENCE      J. Immunol. (1997) in press
AUTHORS      Marion,T.N.
TITLE      Direct Submission
JOURNAL      Submitted (18-APR-1996) Tony N. Marion, Dept. of
REFERENCE      Microbiology/Immunology, University of Tennessee, 858 Madison Ave.,
AUTHORS      Memphis, TN 38163, USA
JOURNAL      Location/Qualifiers
FEATURES
source      1. .302
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/strain="(NZB x NZW) F1"
/db_xref="taxon:10090"
/cell_line="363s.62"
/cell_type="hybridoma"
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V.Region
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/organism="mouse" number 363"
<1. .>302
<1. .>302
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/protein_id="AAB48706.1"
/db_xref="GI:1870292"
/translation="MTXSPSSLSASIGERSVLTICRASODIGSSLMWLOQEPDGTIKRL
IYATSLSDSGVPRKRSRSGSDYSITISLSEDFVYVCQIYASSPYTFGGTKLKIK"
BASE COUNT      74 a      72 c      71 g      84 t      1 others
ORIGIN

Query Match      24.6%; Score 107; DB 10; Length 302;
Best Local Similarity 99.0%; Pred. No. 1.5e-53;
Matches 207; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 163 TGGCTTCAGCAGACAGACAGTGAAGTATTAACGCGCTGATCTACGCCACATCCAGTTTA 222
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DB 94 TGGCTTCAGCAGACAGACAGTGAAGTATTAACGCGCTGATCTACGCCACATCCAGTTTA 153

QY 223 GGTTCGTGGTGTCCCAAAAGGTTGAGTGAGTGTGCGGTGATTTCTCTCACC 282
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DB 154 GATTCTGGTGTCCCAAAAGGTTGAGTGAGTGTGCGGTGATTTCTCTCACC 213

QY 283 ATCAGCAGCCTTGAGTGTGAAGATTTGTAGCCTATTACTGTACAAATATGCTAGTTCT 342
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DB 214 ATCAGCAGCCTTGAGTGTGAAGATTTGTAGCCTATTACTGTACAAATATGCTAGTTCT 273

QY 343 CCGTACACGTTTCGAGGGGGGACCAAGCT 371
      |||||||
DB 274 CCGTACACGTTTCGAGGGGGGACCAAGCT 302

RESULT 5
MMU21066      273 bp      mRNA      ROD      14-FEB-1996
LOCUS      Mus musculus immunoglobulin kappa chain V-J regions mRNA, clone
DEFINITION
ACCESSION      U21066
VERSION      U21066.1 GI:699556
KEYWORDS
SOURCE      house mouse.
ORGANISM      Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
1 (bases 1 to 273)
AUTHORS      Roark,J.H., Kuntz,C.L., Nguyen,K.A., Mandik,L., Cattermole,M. and
TITLE      Erikson,J.
JOURNAL      B cell selection and allelic exclusion of an anti-DNA Ig transgene
REFERENCE      J. Immunol. 154 (9), 4444-4455 (1995)
AUTHORS      Roark,J.H.
TITLE      Direct Submission
JOURNAL      Submitted (15-FEB-1995) Jessica H. Roark, Wistar Institute, 3601
REFERENCE      Spruce St., Philadelphia, PA 19104, USA
JOURNAL      Location/Qualifiers
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source      1. .273
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/codon_start=3
/product="immunoglobulin kappa chain variable and joining
regions"
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BASE COUNT 68 a 63 c 66 g 76 t
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/translation="LSGRKSQSHCRASODIGSSINLWQOEPDGTIKRLIVATSSLDG
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Query Match 23.0%; Score 100; DB 10; Length 273;
Best Local Similarity 99.3%; Pred. No. 2.8e-49;
Matches 150; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 163 TGGCTTCAGCAGGAACAGATGGAACATTTAAAGCCTGATCTAGCCACATCCAGTTTA 222
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DB 66 TGGCTTCAGCAGGAACAGATGGAACATTTAAAGCCTGATCTAGCCACATCCAGTTTA 125
OY 223 GGTTCGTGTCGCCAAAAGTTTCAGTGGCTGAGTGGGTCAAGATTATCTCTCACC 282
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DB 126 GATTCTGCTGCCAAAAGTTTCAGTGGCTGAGTGGGTCAAGATTATCTCTCACC 185
OY 283 ATCAGCAGCCTTGAGCTGGAAGATTTTGTAG 313
|||||
DB 186 ATCAGCAGCCTTGAGCTGGAAGATTTTGTAG 216

RESULT 6
LOCUS AR026090 276 bp DNA
DEFINITION Sequence 44 from patent US 5855885.
ACCESSION AR026090
VERSION AR026090.1 GI:5936930
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 276)
AUTHORS Smith,R., McCafferty,J., Chiswell,D., Darsley,M.J., Fitzgerald,K.,
Kenten,J.H., Martin,M.T., Tilman,R.C. and Williams,R.O.
TITLE Isolation and production of catalytic antibodies using phage
technology
JOURNAL Patent: US 5855885-A 44 05-JAN-1999;
FEATURES
source 1. 276
location/Qualifiers
BASE COUNT 68 a 65 c 63 g 80 t
ORIGIN

PAT 29-SEP-1999
FILED 7/14/1994

Query Match 23.0%; Score 100; DB 6; Length 276;
Best Local Similarity 99.3%; Pred. No. 2.8e-49;
Matches 150; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 163 TGGCTTCAGCAGGAACAGATGGAACATTTAAAGCCTGATCTAGCCACATCCAGTTTA 222
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DB 79 TGGCTTCAGCAGGAACAGATGGAACATTTAAAGCCTGATCTAGCCACATCCAGTTTA 138
OY 223 GGTTCGTGTCGCCAAAAGTTTCAGTGGCTGAGTGGGTCAAGATTATCTCTCACC 282
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DB 139 GATTCTGCTGCCAAAAGTTTCAGTGGCTGAGTGGGTCAAGATTATCTCTCACC 198
OY 283 ATCAGCAGCCTTGAGCTGGAAGATTTTGTAG 313
|||||
DB 199 ATCAGCAGCCTTGAGCTGGAAGATTTTGTAG 229

RESULT 7
LOCUS AR026094 276 bp DNA
DEFINITION Sequence 52 from patent US 5855885.
ACCESSION AR026094
VERSION AR026094.1 GI:5936934
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
Unclassified.

REFERENCE 1 (bases 1 to 276)
AUTHORS Smith,R., McCafferty,J., Chiswell,D., Darsley,M.J., Fitzgerald,K.,
Kenten,J.H., Martin,M.T., Tilman,R.C. and Williams,R.O.
TITLE Isolation and production of catalytic antibodies using phage
technology
JOURNAL Patent: US 5855885-A 52 05-JAN-1999;
FEATURES
source 1. 276
location/Qualifiers
BASE COUNT 67 a 65 c 64 g 80 t
ORIGIN

Query Match 23.0%; Score 100; DB 6; Length 276;
Best Local Similarity 99.3%; Pred. No. 2.8e-49;
Matches 150; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 163 TGGCTTCAGCAGGAACAGATGGAACATTTAAAGCCTGATCTAGCCACATCCAGTTTA 222
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DB 79 TGGCTTCAGCAGGAACAGATGGAACATTTAAAGCCTGATCTAGCCACATCCAGTTTA 138
OY 223 GGTTCGTGTCGCCAAAAGTTTCAGTGGCTGAGTGGGTCAAGATTATCTCTCACC 282
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DB 139 GATTCTGCTGCCAAAAGTTTCAGTGGCTGAGTGGGTCAAGATTATCTCTCACC 198
OY 283 ATCAGCAGCCTTGAGCTGGAAGATTTTGTAG 313
|||||
DB 199 ATCAGCAGCCTTGAGCTGGAAGATTTTGTAG 229

RESULT 8
LOCUS MMYKMRB11 279 bp mRNA
DEFINITION M.musculus mRNA for Igm V(K)MRB11.
ACCESSION X63811
X63811.1 GI:55374
KEYWORDS histone reactive; immunoglobulin light chain variable region;
monoclonal Igm antibody; VK region.
SOURCE house mouse.
ORGANISM Mus musculus.
REFERENCE 1 (bases 1 to 279)
AUTHORS Monestier,M.
TITLE Direct Submission
JOURNAL Submitted (19-DEC-1991) M. Monestier, Center for Mol. Medicine and
Immunology, One Bruce Street, Newark NJ 07103, USA
2 (bases 1 to 279)
AUTHORS Novick,K.E., Fasy,T.M., Losman,M.J. and Monestier,M.
TITLE Polyclonal Igm antibodies generated from autoimmune mice and
selected for histone-binding activity
JOURNAL Int. Immunol. 4 (10), 1103-1111 (1992)
MEDLINE 93144258
COMMENT See also X63798-818.
FEATURES
source 1. 279
location/Qualifiers
/organism="Mus musculus"
/strain="MRL-Mp-1pr/1pr"
/db_xref="taxon:10090"
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BASE COUNT 71 a 68 c 62 g 78 t
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Query Match 23.0%; Score 100; DB 10; Length 279;
Best Local Similarity 99.3%; Pred. No. 2.8e-49;

[illegible]

LOCUS	MM29617	285 bp	mRNA	ROD	08-DEC-1995
DEFINITION	Mus musculus anti-DNA antibody Ig kappa chain mRNA, V-J region, hybridoma 52-46a, partial cds.				
ACCESSION	U29617				
VERSION	U29617.1	GI:896102			
KEYWORDS					
SOURCE	house mouse.				
ORGANISM	Mus musculus.				
REFERENCE	Enkaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.				
AUTHORS	1 (bases 1 to 285)				
TITLE	Ibrahim,S.M., Weigert,M., Basu,C., Erikson,J. and Radic,M.Z.				
JOURNAL	Light chain contribution to specificity in anti-DNA antibodies J. Immunol. 155 (6), 3223-3233 (1995)				
MEDLINE	93403997				
REFERENCE	2 (bases 1 to 285)				
AUTHORS	Ibrahim,S.M., Weigert,M., Basu,C., Erikson,J. and Radic,M.Z.				
TITLE	Direct Submission				
JOURNAL	Submitted (21-JUN-1995) Saleh M. Ibrahim, Molecular Biology, Princeton University, Princeton, NJ 08544, USA				
FEATURES	Location/Qualifiers				
Source	1..285				
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ORIGIN					
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Best Local Similarity	99.3%;	Pred. NO. 2.8e-45;			
Matches 150;	Conservative 0;	Mismatches 1;	Indels 0;	Gaps 0;	
QY	163 TGGCTTCAGCAGGAAACGATGTAATTTAAAGCGCTGATCTACGCCATCCAGTTTA				222
DB	103 TGGCTTCAGCAGGAAACGATGTAATTTAAAGCGCTGATCTACGCCATCCAGTTTA				162
QY	223 GGTTCGTGCTGCCAAAGGTCAGTGGCAGTAGCTGGGTCAGATTATTTCTCAC				282
DB	163 GATTCTGCTGCCCAAAAGGTCAGTGGCAGTAGCTGGGTCAGATTATTTCTCAC				222
QY	283 ATCAGCAGCCTTGAGTCTGAAGATTTTGTAG				313
DB	223 ATCAGCAGCCTTGAGTCTGAAGATTTTGTAG				253
RESULT	11				
LOCUS	103643	324 bp ss-DNA	PAT	21-MAY-1993	
DEFINITION	Sequence 4 from Patent US 4642334.				
ACCESSION	103643				
VERSION	103643.1	GI:268618			
KEYWORDS					
SOURCE	Unknown.				
ORGANISM	Unknown.				
REFERENCE	Unclassified.				
AUTHORS	1 (bases 1 to 324)				
TITLE	Moore,K.W. and Zaffaroni,A.				
JOURNAL	Hybrid DNA prepared binding composition Patent: US 4642334-A 4 10-FEB-1987; DNAX Research Institute of Molecular and Cellular Biology, Inc.; Palo Alto, CA				
FEATURES	Location/Qualifiers				

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source          1. 324
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ORIGIN
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Matches 150; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 163 TGGCTTCACAGCAACCAATGGAATTAACCGCTGATCAGCCACATCCAGTTTA 222
Db 103 TGGCTTCACAGCAACCAATGGAATTAACCGCTGATCAGCCACATCCAGTTTA 162
OY 223 GGTTCGTGCTGCCCAAAAGTTCACTGCGACAGTAGGTCGTGAGATTATTCCTCACC 282
Db 163 GATTCGTGCTGCCCAAAAGTTCACTGCGACAGTAGGTCGTGAGATTATTCCTCACC 222
OY 283 ATCAGCAGCCTTGAGTCTGAAGATTTTGTAG 313
Db 223 ATCAGCAGCCTTGAGTCTGAAGATTTTGTAG 253

RESULT 12
LOCUS 107835 324 bp
DEFINITION Sequence 4 from Patent EP 0088994.
ACCESSION 107835
VERSION 107835.1 GI:589447
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 324)
AUTHORS Moore,K.W. and Zaffaroni,A.
TITLE Hybrid DNA, Binding composition prepared thereby and processes
therefor
JOURNAL Patent: EP 0088994-A2 4 21-SEP-1983;
FEATURES Location/Qualifiers
source 1. 324
BASE COUNT 82 a 80 c 75 g 87 t
ORIGIN

Query Match      23.0%; Score 100; DB 6; Length 324;
Best Local Similarity 99.3%; Pred. No. 2.9e-49;
Matches 150; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 163 TGGCTTCACAGCAACCAATGGAATTAACCGCTGATCAGCCACATCCAGTTTA 222
Db 103 TGGCTTCACAGCAACCAATGGAATTAACCGCTGATCAGCCACATCCAGTTTA 162
OY 223 GGTTCGTGCTGCCCAAAAGTTCACTGCGACAGTAGGTCGTGAGATTATTCCTCACC 282
Db 163 GATTCGTGCTGCCCAAAAGTTCACTGCGACAGTAGGTCGTGAGATTATTCCTCACC 222
OY 283 ATCAGCAGCCTTGAGTCTGAAGATTTTGTAG 313
Db 223 ATCAGCAGCCTTGAGTCTGAAGATTTTGTAG 253

RESULT 13
LOCUS AF045495 381 bp mRNA
DEFINITION Mus musculus dc4 anti-poly(dc) monoclonal antibody kappa light
chain variable region, (Igf) mRNA, partial cds.
ACCESSION AF045495
VERSION AF045495.1 GI:2906073
KEYWORDS
SOURCE house mouse.
ORGANISM Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

```

```

REFERENCE 1 (bases 1 to 381)
AUTHORS O'Connor,K.C., Farrell,T.P., Morikawa,A. and Stollar,B.D.
TITLE Anti-DNA antibodies of normal mice immunized with poly(dc) are
structurally similar to natural autoantibodies
JOURNAL Unpublished
REFERENCE 2 (bases 1 to 381)
AUTHORS O'Connor,K.C., Farrell,T.P., Morikawa,A. and Stollar,B.D.
TITLE Direct Submission
JOURNAL Submitted (02-FEB-1998) Biochemistry, Tufts University School of
Medicine, 136 Harrison Avenue, Boston, MA 02111, USA
FEATURES
source 1. 381
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/strain="C57BL/6"
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<1..>381
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chain"
/protein_id="AAC04523.1"
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1..60
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61..345
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346..>381
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90 c 89 g 109 t
BASE COUNT 93 a
ORIGIN

Query Match      23.0%; Score 100; DB 10; Length 381;
Best Local Similarity 99.3%; Pred. No. 2.9e-49;
Matches 150; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

OY 163 TGGCTTCACAGCAACCAATGGAATTAACCGCTGATCAGCCACATCCAGTTTA 222
Db 163 TGGCTTCACAGCAACCAATGGAATTAACCGCTGATCAGCCACATCCAGTTTA 222
OY 223 GGTTCGTGCTGCCCAAAAGTTCACTGCGACAGTAGGTCGTGAGATTATTCCTCACC 282
Db 223 GATTCGTGCTGCCCAAAAGTTCACTGCGACAGTAGGTCGTGAGATTATTCCTCACC 282
OY 283 ATCAGCAGCCTTGAGTCTGAAGATTTTGTAG 313
Db 283 ATCAGCAGCCTTGAGTCTGAAGATTTTGTAG 313

RESULT 14
LOCUS AF045508 381 bp mRNA
DEFINITION Mus musculus dc10 anti-poly(dc) monoclonal antibody kappa light
chain variable region, (Igf) mRNA, partial cds.
ACCESSION AF045508
VERSION AF045508.1 GI:2906099
KEYWORDS
SOURCE house mouse.
ORGANISM Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
REFERENCE 1 (bases 1 to 381)
AUTHORS O'Connor,K.C., Farrell,T.P., Morikawa,A. and Stollar,B.D.
TITLE Anti-DNA antibodies of normal mice immunized with poly(dc) are

```


GenCore version 4.5
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OM nucleic - nucleic search, using sw model

Run on: February 21, 2002, 04:28:51 : Search time 203.01 Seconds
(without alignments)
1946.835 Million cell updates/sec

Title: US-08-836-455-3

Perfect score: 461
Sequence: 1 ATGGAATGACACTGGCTCT.....CTGGTCCTGGAAGCTGGC 461

Scoring table: OLIGO_NUC
Gapop 60.0, Gapext 60.0

Searched: 930621 seqs, 428662619 residues

Word size: 0

Total number of hits satisfying chosen parameters: 1861242

Minimum DB seq length: 0
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Post-processing: Listing first 45 summaries

Database:

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB	ID	Description
1	461	100.0	461	18	AAT85150	Murine monoclonal
2	461	100.0	461	20	AAV83773	Antibody 11D10 hea
3	76	16.5	458	17	AAT31333	Anti-idiotypic mono
4	76	16.5	458	20	AAZ31366	MAB 1A7 heavy chai
5	76	16.5	458	20	AAH89553	Heavy chain variab
6	76	16.5	458	20	AAH89553	Heavy chain variab
7	67	14.5	861	16	AAO81500	sFv anti-rev seque
8	67	14.5	861	18	AAT45347	Single chain sFv a
9	60	13.0	765	22	AAH86590	DNA encoding a fus
10	60	13.0	765	22	AAH86591	DNA encoding a fus
11	60	13.0	1239	22	AAH86563	DNA encoding a fus

12	60	13.0	1280	22	AAH86564	Anti-CD20 single c
13	59	13.0	1925	21	AAH15019	DNA encoding a CD-
14	59	12.8	360	18	AAH96345	CDNA for Ig heavy
15	59	12.8	420	22	AAH81910	Anti-CA125 b1func
16	59	12.8	447	20	AAH57786	Anti-HCV Ser/Thr p
17	59	12.8	458	10	AAH91146	2H7 Vh sequence.
18	59	12.8	459	20	AAH82357	Mouse antibody 2H7
19	59	12.8	459	22	AAH22070	2H7 heavy chain va
20	59	12.8	470	16	AAO99892	Mouse VLA-4 antibo
21	59	12.8	470	18	AAH74760	Alpha-4 Integrin m
22	59	12.8	477	18	AAH70806	Mouse anti-idiotyp
23	59	12.8	486	18	AAH59339	MH1 monoclonal ant
24	59	12.8	491	18	AAH70868	2H7 heavy chain va
25	59	12.8	491	19	AAH18557	Mouse 2H7 antibody
26	59	12.8	491	19	AAH03926	Mouse 2H7 antibody
27	59	12.8	491	19	AAH18593	Mouse 2H7 antibody
28	59	12.8	518	18	AAH36316	2H7 antibody heavy
29	59	12.8	520	18	AAH51042	Coding sequence fo
30	59	12.8	588	14	AAO43385	H-chain V-region o
31	59	12.8	1347	11	AAO05708	Heavy chain of ant
32	59	12.8	1347	14	AAO51534	Sequence encoding
33	59	12.8	1347	17	AAH29056	Murine anti-BGH MA
34	59	12.8	1347	17	AAH13733	Anti-BGH monoclon
35	59	12.8	1528	5	AAH40024	Combined cDNA inse
36	59	12.8	1528	5	AAH40025	mRNA encoding gamm
37	59	12.8	1553	16	AAO79930	Anti-tobacco mosai
38	59	12.8	1797	17	AAH15733	3B1 single chain a
39	59	12.8	1848	18	AAH96346	Chimeric gene cont
40	59	12.8	3343	11	AAO04655	Plasmid p10169 enc
41	57	12.4	399	16	AAO90425	DNA encoding anti-
42	57	12.4	402	16	AAO90426	DNA encoding anti-
43	57	12.4	474	18	AAH70808	Mouse anti-idiotyp
44	57	12.4	474	18	AAH70810	Mouse anti-idiotyp
45	56	12.1	369	22	AAH27465	Murine coding sequ

ALIGNMENTS

RESULT	1
ID	AAT85150 standard; cDNA; 461 BP.
AC	AAT85150:
XX	
DT	04-JAN-1998 (first entry)
XX	
DE	Murine monoclonal anti-idiotypic antibody 11D10 VH cDNA.
XX	
KW	Monoclonal antibody 11D10; anti-idiotypic antibody; mucin;
KW	human milk fat globule; HMFg; tumour; breast cancer; vaccine; ss.
XX	
OS	Mus musculus.
XX	
FH	Key
FT	sig-peptide
FT	mat-peptide
FT	Location/Qualifiers
FT	1..57
FT	58..461
FT	/*tag= a
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PN	MO9722699-A2.
XX	
PD	26-JUN-1997.
XX	
PF	19-DEC-1996; 96MO-US20757.
XX	
PR	13-DEC-1996; 96US-0575762.
PR	20-DEC-1995; 95US-0575762.
PR	26-JAN-1996; 96US-0591965.
PA	(KENT) UNIV KENTUCKY.
XX	
PI	Chatterjee M, Chatterjee SK, Foon KA;

Anti-CD20 single c
DNA encoding a CD-
CDNA for Ig heavy
Anti-CA125 b1func
Anti-HCV Ser/Thr p
2H7 Vh sequence.
Mouse antibody 2H7
2H7 heavy chain va
Mouse VLA-4 antibo
Alpha-4 Integrin m
Mouse anti-idiotyp
MH1 monoclonal ant
2H7 heavy chain va
Mouse 2H7 antibody
Mouse 2H7 antibody
Mouse 2H7 antibody
2H7 antibody heavy
Coding sequence fo
H-chain V-region o
Heavy chain of ant
Sequence encoding
Murine anti-BGH MA
Anti-BGH monoclon
Combined cDNA inse
mRNA encoding gamm
Anti-tobacco mosai
3B1 single chain a
Chimeric gene cont
Plasmid p10169 enc
DNA encoding anti-
DNA encoding anti-
Mouse anti-idiotyp
Mouse anti-idiotyp
Murine coding sequ

XX	WPI: 1997-341690/31.
DR	P-P-SDB; AAM27120.
XX	
PT	Monoclonal anti-idiotypic antibody 11D10 - elicits immune response
PT	against human milk fat globule disease associated tumours,
PT	especially breast cancer
XX	
PS	Claim 12; Page 94; 130pp; English.
XX	
CC	This cDNA sequence encodes the heavy chain variable region VH
CC	(AAM65150) of monoclonal anti-idiotypic antibody 11D10 produced by
CC	hybridoma cell line AFCC 12020. 11D10 was obtained by immunising
CC	naive mice with MC-10 anti-HMFG antibody to obtain an anti-idiotypic
CC	response. It elicits an immune response against a specific epitope
CC	of a high mol.wt. mucin of human milk fat globule (HMFG). It
CC	induces an immunological response to HMFG in mice, rabbits, monkeys
CC	and patients with advanced HMFG-associated tumours. Pharmaceutical
CC	compositions and vaccines comprising 11D10, 11D10 polypeptides
CC	and/or 11D10 polynucleotides are claimed. Also claimed are
CC	diagnostic kits and methods of using 11D10, 11D10 polypeptides
CC	and/or 11D10 polynucleotides, including methods of treating HMFG-
CC	associated tumours.
XX	
SO	Sequence 461 BP; 112 A; 121 C; 119 G; 109 T; 0 other;

Query Match	100.0%	Score 461;	DB 18;	Length 461;
Best Local Similarity	100.0%	Pred. No. 1.9e-203;		
Matches 461; Conservative	0;	Mismatches	0;	Gaps 0;

[illegible]

RESULT	2
AAV83773	
ID	AAV83773 standard; cDNA, 461 BP.
XX	
AC	AAV83773;
XX	
DT	16-MAR-1999 (first entry)
XX	
EE	Antibody 11D10 heavy chain variable region coding sequence.

XW	Murine; mouse;	antibody; light chain; variable region; anti-idiotype; ss
KW	human milk fat globule;	tumour; ovary; lung; pancreas; carcinoma; breast
XX		
OS	Mus sp.	
FH	Key	Location/Qualifiers
FT	CDS	1..459
FT	/tag=	a
FT	/product=	"antibody 11D10 heavy chain variable region"
FT	/note=	"no stop codon is given at the 3' end of the sequence"
FT		
FT	sig-peptide	1..57
FT		/tag= b
FT	mat.-peptide	58..459
FT		/tag= c
PV		
PN	WO9856419-A1.	
XX		
PD	17-DEC-1998.	
XX		
PF	12-JUN-1998;	98WO-US12250.
XX		
PR	11-JUN-1998;	98US-0096244.
PR	13-JUN-1997;	97US-0049540.
DA	(KENT) UNIV KENTUCKY RES FOUND.	

PI Chatterjee M, Foon KA:
XX
DR WPI: 1999-060029/05.
DR P-PSDB: AAM87594.
XX
XX Delaying development of, or treating, HMFg-associated tumours -
PT using anti-idiotypic antibody 11D10 raised against antibodies to
PT human milk fat globule protein
XX
XX Disclosure: Fig 2; 54pp; English.

This sequence represents the coding sequence for the murine antibody 1D1D heavy chain variable region. This anti-idiotypic antibody is used to delay the development of, or treat, a human milk fat globule (HMFG) associated tumour in an individual having low tumour burden. The antibody 1D1D is used to prevent the recurrence of HMFG-associated tumours e.g. ovarian, non-small cell lung and pancreatic carcinoma, especially for treating breast tumours.

Sequence 461 BP; 112 A; 121 C; 119 G; 109 T; 0 other;

Query Match	100.0%	Score 461;	DB 20;	Length 461;
Best Local Similarity	100.0%	Pred. No. 1.9e-203;		
Matches 461;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0

[illegible]

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OY 301 CAGATGACAGCCGACATCTGAAGACTGCGGTGCTATTTCGTGCAAGAGGAACTGG 360
DB 301 CAGATGACAGCCGACATCTGAAGACTGCGGTGCTATTTCGTGCAAGAGGAACTGG 360
OY 361 GAGGTGCTCTGACACTGAGGAGGCTCAAGAACTCAGTACCGTCTCTGACCAAAACG 420
DB 361 GAGGTGCTCTGACACTGAGGAGGCTCAAGAACTCAGTACCGTCTCTGACCAAAACG 420
OY 421 ACACCCCGACCGCTATCCACTGCTGCTCGAAGCTTGGG 461
DB 421 acaccccgacccgctatccactgctcctggaagcttgg 461

RESULT 3
AAZ31333
ID AAZ31333 standard; cDNA; 458 BP.
AC AAZ31333;
XX
XX
XX 26-FEB-1997 (first entry)
DE Anti-idiotype monoclonal antibody 1A7 variable heavy chain, cDNA.
XX
XX Murine; mouse; anti-idiotype; monoclonal antibody; Mab; 1A7;
XX variable heavy chain; ganglioside 2; GD2; 14G2a; neuroblastoma;
XX glycosphingolipid; human; neuroectodermal; tumour; glioma; lung;
XX malignant melanoma; soft tissue sarcoma; small cell carcinoma;
XX vaccine; treatment; palliate; detection; diagnosis;
XX recombinant production; purification; probe; primer; assay;
XX amplification; gene therapy; ss.
XX
XX Mus musculus.
OS
XX
XX Key Location/Qualifiers
XX mat_peptide 1..456
XX FT /*tag= a
XX FT /*transl_except= pos:373..375, aa:Trp
XX
XX WO9622373-A2.
XX
XX PD 25-JUL-1996.
XX
XX PF 17-JAN-1996; 96WO-US00882.
XX
XX PR 16-JAN-1996; 96US-0372676.
XX PR 17-JAN-1995; 95US-0372676.
XX
XX PA (KENT ) UNIV KENTUCKY.
XX
XX PI Chatterjee M, Chatterjee SK, Foon KA;
XX
XX WPI; 1996-354530/35.
XX DR P-PSDB; AAM03200.
XX
XX PT Monoclonal antibody 1A7 and related polynucleotide(s) and
XX PT polypeptide(s) - useful to treat or palliate a GD2-associated
XX PT disease, e.g. melanoma and glioma
XX
XX PS Claim 11; Fig 2; 14pp; English.
XX
XX The present sequence encodes the murine anti-idiotype monoclonal
XX antibody (Mab) 1A7 variable heavy chain. Mab 1A7 was raised against
XX the anti-ganglioside 2 (GD2) Mab 14G2a, which binds an unique
XX epitope of GD2. As the glycosphingolipid GD2 is expressed at high
XX density by human neuroectodermal tumours, e.g. malignant melanoma,
XX neuroblastoma, glioma, soft tissue sarcoma and small cell carcinoma
XX of the lung, Mab 1A7, or its cDNA can be used in a vaccine to treat
XX or palliate such diseases. They can also be used to reduce the
XX risk of recurrence of a clinically detectable tumour, and detect an
XX anti-GD2 Ab bound to a tumour cell.
XX Mab 1A7 overcomes immune tolerance and induces an immune response
XX against GD2, which comprises anti-GD2 Ab (humoral response) and

```

```

CC GD2-specific cells (cellular response). It can be used to purify
CC anti-1A7 (Ab3), anti-GD2 (Ab1') or 14G2a (Ab1), detect anti-1A7 or
CC anti-GD2 in a sample or measure the level of cellular anti-1A7 or
CC anti-GD2 activity.
CC The cDNA can be used in expression systems for 1A7 prodn., and in
CC the prepn. of probes and primers to respectively assay for 1A7
CC cDNA, and amplify desired polynucleotides for use in gene therapy.
XX
XX SQ Sequence 458 BP; 106 A; 131 C; 114 G; 107 T; 0 other;

Query Match 16.5%; Score 76; DB 17; Length 458;
Best Local Similarity 100.0%; Pred. No. 9,7e-26;
Matches 76; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 366 TGCCTGAGACTACTGGGTCAGAGAACCTGATCAGCTCTCTGACCAAAAGACACC 425
DB 363 tgcctgactactcgtgggtcaagaaacctcagtcaccgtctcctcagcaaaagacacc 422
OY 426 CCCACCCGCTCTATCCA 441
DB 423 cccacccgctctatcca 438

RESULT 4
AAZ31366
ID AAZ31366 standard; cDNA; 458 BP.
AC AAZ31366;
XX
XX
XX 07-FEB-2000 (first entry)
DE Mab 1A7 heavy chain variable region encoding cDNA.
XX
XX Monoclonal antibody; Mab; 1A7; GD2; immune response; melanoma;
XX neuroblastoma; glioma; soft tissue carcinoma; small cell carcinoma;
XX tumor-associated antigen; ss.
XX
XX OS Synthetic.
XX OS Mus sp.
XX
XX PN US5977316-A.
XX
XX PD 02-NOV-1999.
XX
XX PF 16-JAN-1996; 96US-0591196.
XX PR 17-JAN-1995; 95US-0372676.
XX
XX PA (KENT ) UNIV KENTUCKY.
XX
XX PI Foon KA, Chatterjee SK, Chatterjee M;
XX
XX WPI; 1999-619711/53.
XX DR P-PSDB; AAY49210.
XX
XX PT Monoclonal antibody 1A7 which elicits an anti-GD2 immunological
XX PT response, useful for the development of products for the detection and
XX PT treatment of cancers -
XX
XX PS Disclosure; Fig 2; 74pp; English.
XX
XX The invention provides a monoclonal antibody (Mab) designated 1A7, which
XX elicits an anti-GD2 (tumor-associated antigen) immunological response in
XX humans. Mab 1A7 has defined light and heavy chain variable region
XX sequences. The Mab 1A7 and polypeptides can be used for eliciting an
XX anti-GD2 immune response. The polypeptides can also be used for detecting an
XX or purifying anti-GD2 antibody. The products can be used for treating GD2
XX associated diseases, e.g. melanoma, neuroblastoma, glioma, soft tissue
XX carcinoma, and small cell carcinoma. They can be used for palliating the
XX disease or for reducing the risk of recurrence. The present sequence
XX represents the cDNA encoding the heavy chain variable region of Mab 1A7.

```

SQ Sequence 458 BP; 106 A; 131 C; 114 G; 107 T; 0 other;

Query Match 16.5%; Score 76; DB 20; Length 458;
Best Local Similarity 100.0%; Pred. No. 9.7e-26;
Matches 76; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 366 TGCTGTGACTACTGGGGTCAAGAACTCAGTCACCGTCTCTCAGCCAAACGACACC 425
|||||
DB 363 Tgctctggaactactggygtcaagaaacctcagtcacctctctctcaagccaaagacacc 422
OY 426 CCCACCCGCTATCCA 441
|||||
DB 423 cccaccgcgtctatcca 438

RESULT 5

AAK89553
ID AAK89553 standard; cDNA; 458 BP.

AC AAK89553;

DT 06-OCT-1999 (first entry)

DE Heavy chain variable region of MAb 1A7.

KW heavy chain variable region; antibody 1A7; T cell response; melanoma;
KM ganglioside GD2; CDR; complementarity determining region; carcinoma; ss.

OS Mus musculus.

Key Location/Qualifiers

FT CDS 1..456

FT sig_peptide /tag= a

FT /product= "Vh chain MAb 1A7"

FT /note= "No stop codon given"

FT mat_peptide /tag= b

FT /tag= 58..456

FT /*tag= c

PM US5935821-A.

PD 10-AUG-1999.

PF 21-NOV-1996; 96US-0752844.

PR 21-NOV-1996; 96US-0752844.

PR 17-JAN-1995; 95US-0372676.

PR 16-JAN-1996; 96US-0591196.

PA (KENT) UNIV KENTUCKY.

PI Chatterjee M, Chatterjee SK, Foon KA;

DR WPI; 1999-457600/38.

DR P-PSDB; AAY28469.

PT Anti-GD2 immunological peptides useful for the treatment of tumours
especially melanomas and small cell carcinomas

PS Claim 7; Fig 2; 84pp; English.

The sequence is the variable heavy chain region of monoclonal
anti-idiotypic antibody 1A7. The polypeptide encoded by this sequence has
three CDRs (complementarity determining regions). When administered to
an individual the 1A7 antibody induces an immune response against
ganglioside GD2. The light chain variable region of the 1A7 antibody
(AAV28468) is also capable of eliciting an anti GD2 response in mammals.
Both the heavy and light chain variable regions of the 1A7 antibody
produce anti-GD2 T cell and antibody responses. The peptides and
antibodies may be useful for the modulation of ganglioside GD2, and
particularly for the treatment of GD2-associated tumours (e.g. melanoma,

CC neuroblastoma, glioma, soft tissue sarcoma, and small cell carcinoma
CC (including small cell lung cancer).

SQ Sequence 458 BP; 106 A; 131 C; 114 G; 107 T; 0 other;

Query Match 16.5%; Score 76; DB 20; Length 458;
Best Local Similarity 100.0%; Pred. No. 9.7e-26;
Matches 76; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 366 TGCTGTGACTACTGGGGTCAAGAACTCAGTCACCGTCTCTCAGCCAAACGACACC 425
|||||
DB 363 Tgctctggaactactggygtcaagaaacctcagtcacctctctctcaagccaaagacacc 422
OY 426 CCCACCCGCTATCCA 441
|||||
DB 423 cccaccgcgtctatcca 438

RESULT 6

AAK60630
ID AAK60630 standard; cDNA; 458 BP.

AC AAK60630;

DT 03-AUG-1999 (first entry)

DE Monoclonal antibody 1A7 heavy chain variable region encoding cDNA.

KW Psoriasis; immunological response; anti-idiotypic antibody; glutate;
KM chronic plaque; pustular; plaque-type psoriasis; psoriatic arthritis;
KM monoclonal antibody; 1A7; ss.

OS Unidentified.

PM W09925380-A2.

PD 27-MAY-1999.

PF 17-NOV-1996; 98WO-US24607.

PR 16-NOV-1996; 98US-0192838.

PR 17-NOV-1997; 97US-0065774.

PA (KENT) UNIV KENTUCKY RES FOUND.

PI Chatterjee M, Foon KA;

DR WPI; 1999-347407/29.

DR P-PSDB; AAY21546.

PT Treatment of psoriasis

PS Disclosure; Fig 3; 48pp; English.

The invention provides a method of treating of psoriasis by administering
an antigen which has similar immunogenic properties to an antigen
expressed on cells of psoriatic tissue so that an immunological response
is elicited in the individual. The antigen stimulates the generation of
anti-idiotypic antibodies that neutralize the aberrant immune response
causing the psoriasis. The method is used to treat psoriasis, especially
chronic plaque, glutate, pustular, plaque-type psoriasis or psoriatic
arthritis. The compositions allow the individual's own immune system to
act against psoriatic tissue. The present sequence represents a cDNA
encoding the heavy chain variable region of monoclonal antibody 1A7.

SQ Sequence 458 BP; 106 A; 132 C; 113 G; 107 T; 0 other;

Query Match 16.5%; Score 76; DB 20; Length 458;
Best Local Similarity 100.0%; Pred. No. 9.7e-26;
Matches 76; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 366 TGCCTGACTACTGGGTCAGGAACCTCAGTCACCTCTCCATGACCAAAAGCAGACC 425
 |||||||
 DB 363 tgcctgactactcggggtcaagaaacctcagtcacgcgtctccctcagcaaaagcagacc 422
 OY 426 CCCAGCCGCTCATCCA 441
 |||||||
 DB 423 cccagccgctcatcca 438

RESULT 7

AA081500
 ID AA081500 standard; cDNA; 861 BP.

XX
 AC AA081500;

DT 30-AUG-1995 (first entry)

DE sfv anti-rev sequence.

XX HIV-1; human immunodeficiency virus type 1; AIDS; Rev protein;

KW intracellular immunization; gene therapy; single chain antibody; FV;

KW sfv; antibody engineering; resistance; cell immunity; Hela; ss.

OS Synthetic.

XX W09503832-A.

PD 09-FEB-1995.

PF 28-JUL-1994; 94MO-US08448.

PR 30-JUL-1993; 93US-0099870.

XX (UYJE-) UNIV JEFFERSON THOMAS.

PI Duan L, Pomerantz R;

XX WPI; 1995-082039/11.

PT Method for conducting gene therapy - comprises using recombinant

PT gene encoding antibody binding antigen associated with a disease;

PT useful for providing cell immunity.

XX Example 4; Page 23; 62pp; English.

XX The sequence given in AA081500 encodes an sfv anti-rev antibody

CC consisting of the variable domains of the heavy and light chains

CC of a mouse MAb against HIV-1 IIIB rev. The sfv specifically

CC binds a highly conserved Rev domain. Hela T4 cells expressing the

CC sfv were resistant to all HIV-1 clinical isolates tested.

XX Sequence 861 BP; 199 A; 234 C; 230 G; 198 T; 0 other;

OY 374 ACTACTGGGTCAGGAACCTCAGTCACCTCTCCATGACCAAAAGCAGACCCG 433

DB 792 actactggggtcaagaaacctcagtcacgcgtctccctcagcaaaagcagaccccg 851

OY 434 TCTATCC 440

DB 852 tctatcc 858

RESULT 8

AA045347
 ID AA045347 standard; cDNA; 861 BP.

XX
 AC AA045347;

DT 08-AUG-1997 (first entry)

XX Single chain sfv anti-rev antibody encoding cDNA.

DE Gene therapy; antibody; immunisation; human immunodeficiency virus;

KW HIV; human T-cell leukaemia virus; ss.

XX Mus musculus.

OS W09637234-A1.

PD 28-NOV-1996.

PF 23-MAY-1996; 96MO-US07393.

PR 23-MAY-1995; 95US-0447610.

XX (UYJE-) UNIV JEFFERSON THOMAS.

PI Duan L, Pomerantz RJ;

XX WPI; 1997-020948/02.

PT Improved gene therapy using recombinant gene coding for an antibody

PT - for intracellular immunisation against pathogens recognised by the

PT antibody, esp. human immunodeficiency virus HIV-1

XX Example 4; Page 54; 213pp; English.

XX The present sequence encodes a single chain sfv anti-rev antibody

CC constructed using variable domains of the heavy and light chains of a

CC murine monoclonal antibody against (HIV-1IIIB) rev (the parent

CC antibody). This is incorporated into a viral vector where

CC expression of the anti-rev gene causes inhibition of the rev function

CC and so affects replication of the other virus (HIV). Rev is one of the

CC essential regulatory proteins of HIV, it binds to rev responsive element

CC (RRE) and promotes the nuclear export, stabilisation and utilisation of

CC the viral mRNA's containing RRE. A novel gene therapy method has been

CC produced, where a recombinant (rec) gene is introduced into the cells of

CC a mammal. The method is improved by using a rec gene encoding an

CC antibody (Ab) that is selectively specific for an intracellular (IC)

CC antigen associated with a disease. The method is used to prevent or

CC halt the progress of a disease by IC immunisation. Specifically, the Ab

CC can be used to inhibit the replication of a virus, such as human T-cell

CC leukaemia virus or especially HIV-1, or of other pathogens, e.g.

CC bacteria, fungi. The method provides immunity before or after the

CC development of the disease and can be used to control the severity of

XX Sequence 861 BP; 199 A; 234 C; 230 G; 198 T; 0 other;

RESULT 9

AA086590
 ID AA086590 standard; DNA; 765 BP.

XX
 AC AA086590;

DT 02-APR-2001 (first entry)

DE DNA encoding a fusion of a single chain antibody and streptavidin.
XX
XX Streptavidin; tumour cell; cancer; adenocarcinoma;
KM hematological malignancy; ss.
XX
OS Synthetic.
OS Streptomyces avidinii.
OS unidentified.
XX
XX MO200075333-A1.
XX
XX 14-DEC-2000.
XX
XX 05-JUN-2000; 2000WO-US15595.
XX
XX 07-JUN-1999; 99US-0137900.
PR 03-DEC-1999; 99US-0168976.
XX
XX (NEOR-) NEORX CORP.
XX
XX Goshorn SC, Graves SS, Schultz JE, Lin Y, Sanderson JA, Reno JM;
PI WPI; 2001-091213/10.
DR
XX
XX New vector constructs for expressing genomic streptavidin fusion
PT proteins which are useful for targeting tumour cells associated with
PT cancer, e.g. adenocarcinomas -
XX
XX
PS Example 5; Page 95; 100pp; English.
XX
XX The present sequence encodes a fusion of an anti-CD20 single chain
CC antibody and streptavidin. The fusion protein is expressed using
CC vectors of the invention. The specification describes vector constructs
CC for expressing streptavidin fusion proteins. The vector comprises a
CC nucleic acid encoding streptavidin or its functional variant operatively
CC linked to a promoter, and a cloning site for insertion of a second
CC nucleic acid sequence encoding a polypeptide to be fused with
CC streptavidin, interspersed between the promoter and the first nucleic
CC acid sequence. Alternatively, the vector construct comprises a nucleic
CC acid, operatively linked to a promoter, encoding a polypeptide to be
CC fused with streptavidin, and a cloning site for insertion of a second
CC nucleic acid encoding at least 129 amino acids of streptavidin or its
CC functional variant. The fusion proteins are useful for targeting tumour
CC cells, particularly tumour cells associated with cancer,
CC e.g. adenocarcinomas or hematological malignancies. The vector construct
CC is useful for expressing of streptavidin fusion proteins. In particular,
CC these are useful as tools for medical diagnostics and therapeutic
CC purposes, e.g. for detecting the presence or absence of, or treating, a
CC target site within a mammalian host.
XX
XX
SQ Sequence 765 BP; 169 A; 201 C; 230 G; 165 T; 0 other;

Query Match 13.0%; Score 60; DB 22; Length 765;
Best Local Similarity 100.0%; Pred. No. 2.3e-18;
Matches 60; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 145 ACCAGTTACATATGCACTGGGTAAAGCAGACACCTGGACAGGCGCTGGAATGATTGGA 204
|||||
Db 88 accagttacaatgactgctggtaaagcagacacctggaagcgctggaattgga 147

RESULT 10
AAC86591
ID AAC86591 standard; DNA; 765 BP.
XX
XX AAC86591;
AC
XX 02-APR-2001 (first entry)
DT
XX DNA encoding a fusion of a single chain antibody and streptavidin.
DE
XX Streptavidin; tumour cell; cancer; adenocarcinoma;
KM
OS Synthetic.

KM hematological malignancy; ss.
XX
XX Synthetic.
OS Streptomyces avidinii.
OS unidentified.
XX
XX MO200075333-A1.
XX
XX 14-DEC-2000.
XX
XX 05-JUN-2000; 2000WO-US15595.
XX
XX 07-JUN-1999; 99US-0137900.
PR 03-DEC-1999; 99US-0168976.
XX
XX (NEOR-) NEORX CORP.
XX
XX Goshorn SC, Graves SS, Schultz JE, Lin Y, Sanderson JA, Reno JM;
PI WPI; 2001-091213/10.
DR
XX
XX New vector constructs for expressing genomic streptavidin fusion
PT proteins which are useful for targeting tumour cells associated with
PT cancer, e.g. adenocarcinomas -
XX
XX
PS Example 5; Page 95; 100pp; English.
XX
XX The present sequence encodes a fusion of an anti-CD20 single chain
CC antibody and streptavidin. The fusion protein is expressed using
CC vectors of the invention. The specification describes vector constructs
CC for expressing streptavidin fusion proteins. The vector comprises a
CC nucleic acid encoding streptavidin or its functional variant operatively
CC linked to a promoter, and a cloning site for insertion of a second
CC nucleic acid sequence encoding a polypeptide to be fused with
CC streptavidin, interspersed between the promoter and the first nucleic
CC acid sequence. Alternatively, the vector construct comprises a nucleic
CC acid, operatively linked to a promoter, encoding a polypeptide to be
CC fused with streptavidin, and a cloning site for insertion of a second
CC nucleic acid encoding at least 129 amino acids of streptavidin or its
CC functional variant. The fusion proteins are useful for targeting tumour
CC cells, particularly tumour cells associated with cancer,
CC e.g. adenocarcinomas or hematological malignancies. The vector construct
CC is useful for expressing of streptavidin fusion proteins. In particular,
CC these are useful as tools for medical diagnostics and therapeutic
CC purposes, e.g. for detecting the presence or absence of, or treating, a
CC target site within a mammalian host.
XX
XX
SQ Sequence 765 BP; 170 A; 201 C; 231 G; 163 T; 0 other;

Query Match 13.0%; Score 60; DB 22; Length 765;
Best Local Similarity 100.0%; Pred. No. 2.3e-18;
Matches 60; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 145 ACCAGTTACATATGCACTGGGTAAAGCAGACACCTGGACAGGCGCTGGAATGATTGGA 204
|||||
Db 88 accagttacaatgactgctggtaaagcagacacctggaagcgctggaattgga 147

RESULT 11
AAC86563
ID AAC86563 standard; DNA; 1239 BP.
XX
XX AAC86563;
AC
XX 02-APR-2001 (first entry)
DT
XX DNA encoding a fusion of anti-CD20 single chain antibody/streptavidin.
DE
XX Streptavidin; tumour cell; cancer; adenocarcinoma;
KM
XX hematological malignancy; ss.
XX
OS Synthetic.

OS	Streptomyces avidinii.
OS	Homo sapiens.
XX	
PN	MO200075333-A1.
XX	
PD	14-DEC-2000.
XX	
PF	05-JUN-2000; 2000WO-USI5595.
XX	
PR	07-JUN-1999; 99US-0137900.
XX	
PR	03-DEC-1999; 99US-0168976.
XX	
PA	(NEOR-) NEORX CORP.
XX	
P1	Goshorn SC, Graves SS, Schultz JE, Iln Y, Sanderson JA, Reno JM;
XX	
DR	WPI; 2001-091213/10.
DR	P-PSDB; AAB30694.
XX	
PT	New vector constructs for expressing genomic streptavidin fusion
PT	proteins which are useful for targeting tumour cells associated with
XX	cancer, e.g. adenocarcinomas -
XX	
PS	Example 2; Fig 11A; 100bp; English.
XX	
CC	The present sequence encodes a fusion of an anti-CD20 single chain
CC	antibody (B959) streptavidin. The fusion protein is expressed using
CC	vectors of the invention. The specification describes vector constructs
CC	for expressing streptavidin fusion proteins. The vector comprises a
CC	nucleic acid encoding streptavidin or its functional variant operatively
CC	linked to a promoter, and a cloning site for insertion of a second
CC	nucleic acid sequence encoding a polypeptide to be fused with
CC	streptavidin, intersposed between the promoter and the first nucleic
CC	acid sequence. Alternatively, the vector construct comprises a nucleic
CC	acid, operatively linked to a promoter, encoding a polypeptide to be
CC	fused with streptavidin, and a cloning site for insertion of a second
CC	nucleic acid encoding at least 129 amino acids of streptavidin or its
CC	functional variant. The fusion proteins are useful for targeting tumour
CC	cells, particularly tumour cells associated with cancer,
CC	e.g. adenocarcinomas or hematological malignancies. The vector construct
CC	is useful for expressing of streptavidin fusion proteins. In particular,
CC	these are useful as tools for medical diagnostics and therapeutic
CC	purposes, e.g. for detecting the presence or absence of, or treating, a
CC	target site within a mammalian host.
SQ	
SQ	Sequence 1239 BP; 270 A; 392 C; 356 G; 221 T; 0 other:
	Query Match 13.0%; Score 60; DB 22; Length 1239;
	Best Local Similarity 100.0%; Pred. No. 2.2e-18;
	Matches 60; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY	145 ACCACTTTCATATGCTACCTGGGTAAAGCAGACACTCGACAGGCGCTTGAAATTGCA 204
Db	469 acccgttacaatatgcactggtgaagacagaccctgcaaggcgctgaatgatgtga 528
RESULT 12	
AAC86564	
ID AAC86564 standard; DNA; 1280 BP.	
XX AAC86564;	
XX	
DT 02-APR-2001 (first entry)	
XX	
DE Anti-CD20 single chain antibody/streptavidin fusion protein cassette.	
XX	
KW Streptavidin; tumour cell; cancer; adenocarcinoma;	
KW hematological malignancy; ss.	
XX	
OS Synthetic.	
OS Streptomyces avidinii.	
OS Homo sapiens	

Key	Location/Qualifiers
EH CDS	3..1274
ET	/*tag= a
FT	/product= "anti-CD20 scFv and streptavidin fusion"
FN	
PN	W0200075333-A1.
XX	
XX	
XX	14-DEC-2000.
XX	
XX	05-JUN-2000; 2000OWO-US15595.
XX	
XX	07-JUN-1999; 99US-0137900.
XX	
XX	03-DEC-1999; 99US-0168976.
XX	
XX	(NEOR-) NEORX CORP.
XX	
PI	Goshorn SC, Graves SS, Schultz JE, Lin Y, Sanderson JA, Reno JM;
DR	WPI: 2001-091213/10.
DR	P-PSDB: AAB30695.
XX	
PT	New vector constructs for expressing genomic streptavidin fusion
PT	proteins which are useful for targeting tumour cells associated with
PT	cancer, e.g. adenocarcinomas -
XX	
PS	Example 2; Fig 11C; 100pp; English.
XX	
CC	The present sequence encodes a fusion of an anti-CD20 single chain
CC	antibody (B9F9) streptavidin. The fusion protein is expressed using
CC	vectors of the invention. The specification describes vector constructs
CC	for expressing streptavidin fusion proteins. The vector comprises a
CC	nucleic acid encoding streptavidin or its functional variant operatively
CC	linked to a promoter, and a cloning site for insertion of a second
CC	nucleic acid sequence encoding a polypeptide to be fused with
CC	streptavidin, interposed between the promoter and the first nucleic
CC	acid sequence. Alternatively, the vector construct comprises a nucleic
CC	acid, operatively linked to a promoter, encoding a polypeptide to be
CC	fused with streptavidin, and a cloning site for insertion of a second
CC	nucleic acid encoding at least 129 amino acids of streptavidin or its
CC	functional variant. The fusion proteins are useful for targeting tumour
CC	cells, particularly tumour cells associated with cancer,
CC	e.g. adenocarcinomas or hematological malignancies. The vector construct
CC	is useful for expressing of streptavidin fusion proteins. In particular,
CC	these are useful as tools for medical diagnostics and therapeutic
CC	purposes, e.g. for detecting the presence or absence of, or treating, a
CC	target site within a mammalian host.
XX	
XX	
SQ	Sequence 1280 BP; 267 A; 397 C; 388 G; 228 T; 0 other;
XX	
Query Match	13.0%; Score 60; DB 22; Length 1280;
Best Local Similarity	100.0%; Pred. No. 2.2e-18;
Matches 60; Conservative	0; Mismatches 0; Indels 0; Gaps 0;
Oy	145 ACCACTTACAAATATGACGACGCGGTAAAGCAGACACCTGCGACAGCGCTGGAAATGATTTGGA 204
Db	96 accaggtacataatgcaactggtgtaagaagacagacacctggtgacagggcttgatgtgga 155
RESULT 13	
ID	AAA15019
XX	AAA15019 standard; DNA: 1925 BP.
XX	
XX	AAA15019;
XX	
XX	21-AUG-2000 (first entry)
XX	
DE	DNA encoding a CD-20 specific chimeric receptor.
XX	
XX	CD20-specific receptor; CD-20 specific redirected T cell; leukemia;
KW	CD20+ malignancy; non-Hodgkin's lymphoma; mycobacterial chemotherapy;
KW	stem cell rescue; autoimmune disease; lupus; rheumatoid arthritis; ss.

```

XX OS Synthetic.
XX OS Mus sp.
XX FH Key
XX FT CDS
XX FT 27..1928
XX FT /*tag= a
XX PN MO200023573-A2.
XX PD 27-APR-2000.
XX PF 20-OCT-1999; 99WO-US24484.
XX PR 20-OCT-1998; 98US-0105014.
XX PA (CITY ) CITY OF HOPE.
XX P1 Raubitschek A, Jensen MC, Wu AM;
XX P2 WPI: 2000-339676/29.
XX DR P-PSDB; AAY84965.
XX XX
XX PT Genetically engineered CD20-specific redirected T cells useful for
XX PT treating a CD20+ malignancy, such as non-Hodgkin's lymphoma or CD20+
XX PT acute or chronic leukemia, and autoimmune disease -
XX PS Example 1; Page 50-53; 58pp; English.
XX CC The present sequence encodes a synthetic CD20-specific chimeric
XX CC receptor. The specification describes CD-20 specific redirected T cells
XX CC which express and bear on the cell surface membrane a CD20-chimeric
XX CC receptor comprising an intracellular signalling domain, a transmembrane
XX CC domain and an extracellular domain, the extracellular domain comprising
XX CC a CD20-specific receptor. The genetically engineered CD20-specific
XX CC redirected T cells are useful for treating a CD20+ malignancy, such
XX CC as non-Hodgkin's lymphoma or CD20+ acute or chronic leukemia, in a
XX CC human patient having previously undergone myeloablative chemotherapy and
XX CC stem cell rescue. The genetically engineered CD20-specific redirected
XX CC T cells are also useful for abrogating an untoward B cell function, such
XX CC as autoimmune disease (lupus or rheumatoid arthritis) in a patient.
XX S0 Sequence 1925 BP; 471 A; 554 C; 541 G; 359 T; 0 other;

Query Match 13.0%; Score 60; DB 21; Length 1925;
Best Local Similarity 100.0%; Pred. No. 2.2e-18;
Matches 60; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 145 ACCAGTTACAAATGACACTGGGTAAGACAGACACCTGGAGAGGCGCTGGAATGATTGGA 204
Db 546 accagttacataatgacctggttaagacagacacctgagcagcgctggaattgga 605

RESULT 14
AAT96345
ID AAT96345 standard; CDNA; 360 BP.
XX AC
XX AC AAT96345;
XX DT 08-APR-1998 (first entry)
XX DE CDNA for Ig heavy chain variable region of anti-asparaginase Mab.
XX XX
XX KW Immunoglobulin; Ig; heavy chain; variable region; murine;
XX KW asparaginase II; monoclonal antibody; Mab;
XX KW recombinant chimeric polypeptide; ss.
XX OS Mus sp.
XX OS US568579-A.
XX PN 11-NOV-1997.
XX PD

```

```

XX XX
XX PF 23-MAY-1995; 95US-0447422.
XX PR 22-JUN-1993; 93US-0081410.
XX PR 21-JUN-1988; 88US-0205748.
XX PR 31-AUG-1992; 92US-0938505.
XX PR 23-MAY-1995; 95US-0447422.
XX PA (HYBR-) HYBRISENS LTD.
XX P1 Ramjeesingh M, Rothstein A, Shami EY;
XX P2 WPI: 1997-558200/51.
XX DR
XX XX
XX PT Self-protecting chimeric polypeptide comprising biologically active
XX PT sequence and single-chain antibody sequence - has resistance to e.g.
XX PT disrupting temperature, presence of proteolytic enzymes, etc.
XX PS Example 2; Columns 27-28; 29pp; English.
XX CC The present sequence is the CDNA for the immunoglobulin (Ig) heavy
XX CC chain variable region of a murine anti-asparaginase II monoclonal
XX CC antibody (Mab). The CDNA was used in the preparation of a novel
XX CC recombinant chimeric polypeptide, comprising a 1st region
XX CC comprising a biologically active domain and another domain
XX CC containing an epitope, linked via a polypeptide to a 2nd region
XX CC including a single chain antibody (SCA) having the light and heavy
XX CC chains of an antibody variable region which specifically binds the
XX CC epitope in the 1st region. The chimeric polypeptide assumes a
XX CC conformation in which the SCA is bound to the epitope of the 1st
XX CC region and protects its biological activity from deactivation by
XX CC denaturing temperatures or pH conditions, proteolytic enzymes,
XX CC oxidizing agents or alcohol. The regions of the chimeric
XX CC polypeptide interact to form a structure analogous to an
XX CC antibody-antigen complex. A L-asparaginase-SCA fusion protein of
XX CC the above type has better trypsin resistance than free
XX CC L-asparaginase.
XX S0 Sequence 360 BP; 85 A; 101 C; 95 G; 79 T; 0 other;

Query Match 12.8%; Score 59; DB 18; Length 360;
Best Local Similarity 100.0%; Pred. No. 6.9e-18;
Matches 59; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 371 TGGACTACTGGGGTCAAGAACCTCAGTCACCGTCTCTGACGCCAAAGACACCCCA 429
Db 270 tggactactggggtcaagaaacctcagtcaccgctctctcagccaagacacccca 328

RESULT 15
AAF81910
ID AAF81910 standard; DNA; 420 BP.
XX AC
XX AC AAF81910;
XX DT 08-JUN-2001 (first entry)
XX DE Anti-CA125 bifunctional antibody VH nucleotide sequence.
XX XX
XX KW Anti-CA125 bifunctional antibody; cancer; immunoglobulin; tuftsin;
XX KW genetic engineering; human; plchia pastoris; ds.
XX OS Homo sapiens.
XX OS plchia pastoris.
XX OS Synthetic.
XX FH Key
XX FT 1..420
XX FT /*tag= a
XX FT /partial
XX FT /product= "Anti-CA125 bifunctional antibody VH region"
XX FT /transl_except= (pos:304..306,aa:Ala)
XX FT

```


/note= "no start or stop codons given"

FT CN1276428-A.
 XX
 PN 13-DEC-2000.
 XX
 PD 04-JUN-1999; 99CN-0107873.
 XX
 PF 04-JUN-1999; 99CN-0107873.
 XX
 PR (MAIL-) MAILING BIO-ENG CO LTD CHANGCHUN.
 XX
 PA
 XX
 PI Luo D, Li H, Bai Y;
 XX
 XX WPI: 2001-227216/24.
 DR P-PSDB; AAB/4791.
 XX
 XX Clone and expression of anti-CA125 bifunctional genetically engineered
 PT antibody -
 XX
 PS Claim 7; Fig 6; 27pp; Chinese.
 XX
 CC The present invention relates to the cloning and expression of an
 CC anti-CA125 bifunctional genetically engineered antibody and discloses a
 CC nucleotide sequence of molecular targeting medicine for cancers. For
 CC the sequence, the gene fragments in heavy-chain and light-chain
 CC variable regions of anti-CA125 immunoglobulin are used to construct
 CC single-chain antibody. The single-chain antibody gene is directly fused
 CC with the human tuftsin gene. The bifunctional genetically engineered
 CC antibody expressed by the gene is composed of 259 amino acids. The
 CC recombination expression vector with the nucleotide sequence and *Pichia*
 CC *pastoris* containing the vector are also disclosed. The present sequence
 CC encodes the specifically claimed anti-CA125 bifunctional antibody
 CC VH region.
 XX
 SQ Sequence 420 BP; 103 A; 108 C; 103 G; 106 T; 0 other;

Query Match 12.8%; Score 59; DB 22; Length 420;

Best Local Similarity 100.0%; Pred. No. 6,9e-18;

Matches 59; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 371 TGGACTACTGGGGTCAAGAACCTCAGTACCGTCTCAGCCAAAGACACACCCCA 429
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 DB 356 tggactactggggccaagcaacctcagtcacgcgtctcctcagccaagaacgacaccccca 414

Search completed: February 21, 2002, 04:28:53
 Job time: 28002 sec

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OM nucleic - nucleic search, using sw model

Run on: February 21, 2002, 04:00:25 ; Search time 2034.98 Seconds

(without alignments)
2434.326 Million cell updates/sec

Title: US-08-836-455-3

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Scoring table: OLIGO_NUC
Gapop 60.0 , Gapext 60.0

Searched: 11351937 seqs, 537289281 residues

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Total number of hits satisfying chosen parameters: 22703874

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Listing first 45 summaries

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2: em_esthum:*
3: em_estin:*
4: em_estom:*
5: em_estpl:*
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7: em_estro:*
8: em_estov:*
9: em_hic:*
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13: gD_gss:*
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17: em_gss_pln:*
18: em_gss_pro:*
19: em_gss_rod:*
20: em_gss_vrt:*
21: em_gss_other:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	59	12.8	676	10	BE369087 601221765
2	49	10.6	639	10	BE371136 601218628
3	49	10.6	802	11	BF137216 601784466
4	49	10.6	883	11	BF151077 602917012
5	49	10.6	1012	11	BF142302 601791844
6	48	10.4	718	11	BF136279 601780988
7	48	10.4	862	11	BF143948 601786493
8	47	10.2	913	11	BF583109 602098016
9	47	10.2	1384	12	AK002875 602098016
10	43	9.3	406	11	BF016722 y34h12.y
11	42	9.1	560	11	BF581663 602099628
12	42	9.1	604	10	BE367979 601221857

13	42	9.1	650	11	BF579001 602096117
14	42	9.1	666	11	BE363642 602828443
15	42	9.1	671	11	BF182141 601804682
16	42	9.1	690	11	BG968682 602836513
17	42	9.1	706	11	BE915586 601668633
18	42	9.1	724	11	BF168514 601775412
19	42	9.1	738	11	BG965088 602829160
20	42	9.1	746	11	BG966840 602834339
21	42	9.1	776	11	BF182218 601804766
22	42	9.1	781	11	BG967007 602834239
23	42	9.1	811	11	BG966605 602834440
24	42	9.1	819	11	BG966397 602832896
25	42	9.1	837	11	BG966355 602832843
26	42	9.1	862	11	BF102617 602888151
27	42	9.1	864	10	BE309336 601093720
28	42	9.1	890	11	BG868002 602788352
29	42	9.1	911	10	BE286958 601092470
30	42	9.1	927	11	BF179165 601807413
31	42	9.1	938	11	BG967834 602832666
32	42	9.1	940	11	BF178694 601806679
33	42	9.1	963	11	BF578938 602095519
34	42	9.1	969	11	BF579260 602093431
35	42	9.1	987	11	BF577496 602092243
36	41	8.9	684	11	BF577847 602092155
37	39	8.5	724	11	BG962137 602826902
38	38	8.5	745	11	BG871607 602790090
39	38	8.2	616	11	BF136295 601781413
40	38	8.2	659	11	BG962947 602827932
41	38	8.2	735	11	BG966898 602834104
42	38	8.2	804	11	BF110243 602900667
43	38	8.2	941	11	BF138189 601781314
44	38	8.2	979	11	BF579639 602093508
45	37	8.0	770	11	BG969011 602834949

ALIGNMENTS

RESULT 1
BE369087 676 bp mRNA EST 21-JUL-2000
601221765F1 NCI_CGAP_Lu29 Mus musculus cDNA clone IMAGE:3590320 5',
LOCUS
DEFINITION
mRNA sequence.
ACCESSION
BE369087 GI:9314450
VERSION
BE369087.1
KEYWORDS
EST.
SOURCE
house mouse.
ORGANISM
Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
REFERENCE
1 (bases 1 to 676)
NIH-MGC <http://mgc.nci.nih.gov/>.
AUTHORS
National Institutes of Health, Mammalian Gene Collection (MGC)
TITLE
Unpublished (1999)
JOURNAL
Contact: Robert Strausberg, Ph.D.
COMMENT
Email: cgapbs-remail.nih.gov
Tissue Procurement: Gilbert Smith, Ph.D.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LNL)
DNA sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LNL at:
<http://image.llnl.gov>
Plate: L14M6758 row: b column: 17
High quality sequence stop: 580.
Location/Qualifiers
1. 676
/organism="Mus musculus"
/strain="C2BECH II (fetal)"
/db_xref="taxon:10090"
/clone="IMAGE:3590320"
/clone_lib="NCI_CGAP_Lu29"
/tissue_type="spontaneous tumor, metastatic to mammary."

FEATURES

source

Stem cell origin."
/lab_host="DH10B"
/note="Organ: Lung; Vector: pCMV-SPORT6; Site:1; Salt:
Site:2: NotI; Cloned unidirectionally. Primer: Oligo dt.
Library constructed by Life Technologies. Investigator
providing samples: Gilbert Smith, NIH"
BASE COUNT 161 a 188 c 173 g 154 t
ORIGIN

Query Match 12.8%; Score 59; DB 10; Length 676;
Best Local Similarity 100.0%; Pred. No. 1.7e-19;
Matches 59; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 371 TGGACTACTGGGGTCAAGAACCTCAGTCACCGCTCCTCCACCAAAAGACCCCA 429
|||||
Db 390 TGGACTACTGGGGTCAAGAACCTCAGTCACCGCTCCTCCACCAAAAGACCCCA 448

RESULT 2
LOCUS BE371136 639 bp mRNA EST 21-JUL-2000
DEFINITION 601218628P1 NCI_CGAP_Lu29 Mus musculus cDNA clone IMAGE:3587742 5',
mRNA sequence.
ACCESSION BE371136
VERSION BE371136.1 GI:9316499
KEYWORDS EST.
SOURCE house mouse.
ORGANISM Mus musculus.
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

REFERENCE 1 (bases 1 to 639)
AUTHORS NIH-MGC http://mgc.nci.nih.gov/.
TITLE National Institutes of Health, Mammalian Gene Collection (MGC)
JOURNAL Unpublished (1999)
COMMENT Contact: Robert Strausberg, Ph.D.
Email: cgabbs-remail.nih.gov
Tissue Procurement: Gilbert Smith, Ph.D.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LMNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LMNL at:
http://image.llnl.gov
Plate: LHAM8751 row: g column: 07
High quality sequence stop: 552.

FEATURES
Source Location/Qualifiers
1..639

/organism="Mus musculus"
/strain="7CZECH II (Feral)"
/db_xref="taxon:10090"
/clone="IMAGE:3587742"
/clone_lib="NCI_CGAP_Lu29"
/tissue_type="spontaneous tumor, metastatic to mammary.
Stem cell origin."
/lab_host="DH10B"
/note="Organ: Lung; Vector: pCMV-SPORT6; Site:1; Salt:
Site:2: NotI; Cloned unidirectionally. Primer: Oligo dt.
Library constructed by Life Technologies. Investigator
providing samples: Gilbert Smith, NIH"
BASE COUNT 149 a 171 c 164 g 155 t
ORIGIN

Query Match 10.6%; Score 49; DB 10; Length 639;
Best Local Similarity 100.0%; Pred. No. 1.7e-14;
Matches 49; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 371 TGGACTACTGGGGTCAAGAACCTCAGTCACCGCTCCTCCACCAAAAC 419
|||||
Db 399 TGGACTACTGGGGTCAAGAACCTCAGTCACCGCTCCTCCACCAAAAC 447

RESULT 3
LOCUS BF137216 802 bp mRNA EST 24-OCT-2000
DEFINITION 601784466P1 NCI_CGAP_Lu30 Mus musculus cDNA clone IMAGE:4012360 5',
mRNA sequence.
ACCESSION BF137216
VERSION BF137216.1 GI:10976256
KEYWORDS EST.

SOURCE house mouse.
ORGANISM Mus musculus.
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

REFERENCE 1 (bases 1 to 802)
AUTHORS NIH-MGC http://mgc.nci.nih.gov/.
TITLE National Institutes of Health, Mammalian Gene Collection (MGC)
JOURNAL Unpublished (1999)
COMMENT Contact: Robert Strausberg, Ph.D.
Email: cgabbs-remail.nih.gov
Tissue Procurement: Gilbert Smith, Ph.D.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LMNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: NCI-CGAP clone distribution information can be
found through the I.M.A.G.E. Consortium/LMNL at:
http://image.llnl.gov
Plate: LHAM9253 row: c column: 17
High quality sequence stop: 697.

FEATURES
Source Location/Qualifiers
1..802

/organism="Mus musculus"
/strain="7CZECH II"
/db_xref="taxon:10090"
/clone="IMAGE:4012360"
/clone_lib="NCI_CGAP_Lu30"
/tissue_type="tumor, metastatic to mammary"
/lab_host="DH10B"
/note="Organ: Lung; Vector: pCMV-SPORT6; Site:1; NotI;
Site:2: Salt; transgenic model MMT-1, expression driven by
MMTV-LTR enhancer; Cloned unidirectionally. Primer: Oligo
dt. Library constructed by Life Technologies.
Investigator providing samples: Gilbert Smith, NIH"
BASE COUNT 191 a 217 c 211 g 183 t
ORIGIN

Query Match 10.6%; Score 49; DB 11; Length 802;
Best Local Similarity 100.0%; Pred. No. 1.7e-14;
Matches 49; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 371 TGGACTACTGGGGTCAAGAACCTCAGTCACCGCTCCTCCACCAAAAC 419
|||||
Db 433 TGGACTACTGGGGTCAAGAACCTCAGTCACCGCTCCTCCACCAAAAC 481

RESULT 4
LOCUS B1151077 883 bp mRNA EST 05-JUL-2001
DEFINITION 60291012P1 NCI_CGAP_Lu29 Mus musculus cDNA clone IMAGE:5067314 5',
mRNA sequence.
ACCESSION B1151077
VERSION B1151077.1 GI:14611078
KEYWORDS EST.
SOURCE house mouse.
ORGANISM Mus musculus.
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

REFERENCE 1 (bases 1 to 883)
AUTHORS NIH-MGC http://mgc.nci.nih.gov/.
TITLE National Institutes of Health, Mammalian Gene Collection (MGC)
JOURNAL Unpublished (1999)
COMMENT Contact: Robert Strausberg, Ph.D.
Email: cgabbs-remail.nih.gov
Tissue Procurement: Gilbert Smith, Ph.D.

CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LNLN)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LNLN at:
<http://image.llnl.gov>
Plate: LLM11181 row: h column: 03
High quality sequence stop: 719.

FEATURES

1. 883
Location/Qualifiers

/organism="Mus musculus"
/strain="CZECH II (fetal)"
/db_xref="taxon:10090"
/clone_1lb="IMAGE:5067314"
/clone_1lb="NCI_CGAP_Lu29"
/tissue_type="spontaneous tumor, metastatic to mammary.
Stem cell origin."
/lab_host="DH10B"
/note="Organ: Lung; Vector: pCMV-SPORT6; Site_1: SalI;
Site_2: NotI; Cloned unidirectionally. Primer: Oligo dt.
Library constructed by Life Technologies. Investigator
providing samples: Gilbert Smith, NIH"
BASE COUNT 211 a 268 c 217 g 187 t
ORIGIN

Query Match 10.6%; Score 49; DB 11; Length 883;
Best Local Similarity 100.0%; Pred. No. 1.7e-14;
Matches 49; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 371 TGGACTACTGGGGTCAAGAACTCAGTACCGCTCTCTCAGCCAAAC 419
|||||
Db 255 TGGACTACTGGGGTCAAGAACTCAGTACCGCTCTCTCAGCCAAAC 303

RESULT 5

BF142302 1012 bp mRNA EST 24-OCT-2000
LOCUS 601791844F1 NCI_CGAP_Lu30 Mus musculus cDNA clone IMAGE:4022459 5',
DEFINITION mRNA sequence.
VERSION BF142302 GI:10981252
KEYWORDS EST.
SOURCE house mouse.
ORGANISM Mus musculus

REFERENCE Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.
TITLE 1 (bases 1 to 1012)
JOURNAL Unpublished (1999)
COMMENT Contact: Robert Strausberg, Ph.D.
Email: cgabs-remail.nih.gov
Tissue Procurement: Gilbert Smith, Ph.D.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LNLN)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: NCI-CGAP clone distribution information can be
found through the I.M.A.G.E. Consortium/LNLN at:
<http://image.llnl.gov>
Plate: LLM9279 row: h column: 12
High quality sequence stop: 711.

FEATURES

1. 1012
Location/Qualifiers

/organism="Mus musculus"
/strain="CZECH II"
/db_xref="taxon:10090"
/clone="IMAGE:4022459"
/clone_1lb="NCI_CGAP_Lu30"
/tissue_type="tumor, metastatic to mammary"
/lab_host="DH10B"
/note="Organ: Lung; Vector: pCMV-SPORT6; Site_1: NotI;
Site_2: SalI; transgenic model WNT-1, expression driven by

MMTV-LTR enhancer; Cloned unidirectionally. Primer: Oligo
dt. Library constructed by Life Technologies.
Investigator providing samples: Gilbert Smith, NIH"
BASE COUNT 273 a 271 c 267 g 201 t
ORIGIN

Query Match 10.6%; Score 49; DB 11; Length 1012;
Best Local Similarity 100.0%; Pred. No. 1.8e-14;
Matches 49; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 371 TGGACTACTGGGGTCAAGAACTCAGTACCGCTCTCTCAGCCAAAC 419
|||||
Db 411 TGGACTACTGGGGTCAAGAACTCAGTACCGCTCTCTCAGCCAAAC 459

RESULT 6

BF136279 718 bp mRNA EST 24-OCT-2000
LOCUS 601780988F1 NCI_CGAP_Lu30 Mus musculus cDNA clone IMAGE:4009197 5',
DEFINITION mRNA sequence.
VERSION BF136279 GI:10975319
KEYWORDS EST.
SOURCE house mouse.
ORGANISM Mus musculus

REFERENCE Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.
TITLE 1 (bases 1 to 718)
JOURNAL Unpublished (1999)
COMMENT Contact: Robert Strausberg, Ph.D.
Email: cgabs-remail.nih.gov
Tissue Procurement: Gilbert Smith, Ph.D.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LNLN)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: NCI-CGAP clone distribution information can be
found through the I.M.A.G.E. Consortium/LNLN at:
<http://image.llnl.gov>
Plate: LLM9244 row: o column: 22
High quality sequence stop: 671.

FEATURES

1. 718
Location/Qualifiers

/organism="Mus musculus"
/strain="CZECH II"
/db_xref="taxon:10090"
/clone="IMAGE:4009197"
/clone_1lb="NCI_CGAP_Lu30"
/tissue_type="tumor, metastatic to mammary"
/lab_host="DH10B"
/note="Organ: Lung; Vector: pCMV-SPORT6; Site_1: NotI;
Site_2: SalI; transgenic model WNT-1, expression driven by
MMTV-LTR enhancer; Cloned unidirectionally. Primer: Oligo
dt. Library constructed by Life Technologies.
Investigator providing samples: Gilbert Smith, NIH"
BASE COUNT 173 a 196 c 181 g 168 t
ORIGIN

Query Match 10.4%; Score 48; DB 11; Length 718;
Best Local Similarity 100.0%; Pred. No. 5.6e-14;
Matches 48; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 371 TGGACTACTGGGGTCAAGAACTCAGTACCGCTCTCTCAGCCAAAC 418
|||||
Db 410 TGGACTACTGGGGTCAAGAACTCAGTACCGCTCTCTCAGCCAAAC 457

RESULT 7

BF143948 862 bp mRNA EST 24-OCT-2000
LOCUS

DEFINITION 601786493F1 NCI_CGAP_Lu30 Mus musculus cDNA clone IMAGE:4014430 5', mRNA sequence.

ACCESSION BF143948

VERSION BF143948.1 GI:10982988

KEYWORDS EST.

SOURCE house mouse.

ORGANISM Mus musculus

REFERENCE 1 (bases 1 to 862)

AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.

TITLE National Institutes of Health, Mammalian Gene Collection (MGC)

JOURNAL Unpublished (1999)

COMMENT Contact: Robert Strausberg, Ph.D.
Email: cgapsb@mail.nih.gov
Tissue Procurement: Gilbert Smith, Ph.D.
cDNA Library Preparation: Life Technologies, Inc.
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: NCI-CGAP clone distribution information can be found through the I.M.A.G.E. Consortium/LNLN at: <http://image.lnl.gov>
Plate: L1AM9258 row: 1 column: 23
High quality sequence stop: 671.

FEATURES
source location/Qualifiers
1..862
/organism="Mus musculus"
/strain="CECH 1T"
/db_xref="taxon:10090"
/clone="IMAGE:4014430"
/clone_1lb="NCI_CGAP_Lu30"
/tissue_type="tumor, metastatic to mammary"
/lab_host="DH10B"
/note="Organ: lung; Vector: pCMV-SPORT6; Site:1: NotI; Site:2: SalI; transgenic model WNT-1, expression driven by MMTV-LTR enhancer; Cloned unidirectionally. Primer: Oligo dT. Library constructed by Life Technologies. Investigator providing samples: Gilbert Smith, NIH"

BASE COUNT 213 a 236 c 236 g 176 t 1 others

ORIGIN

Query Match 10.4%; Score 48; DB 11; Length 862;
Best Local Similarity 100.0%; Pred. No. 5.7e-14;
Matches 48; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 372 GGACACGCGGCTCAAGACCTGACCGCTCCCTCAGCCAAAC 419
|||||
Db 411 GGACTACTGGGCTCAAGACCTGACCGCTCCCTCAGCCAAAC 458

RESULT 8

LOCUS BF583109 913 bp mRNA EST 12-DEC-2000

DEFINITION 602096016F1 NCI_CGAP_Co24 Mus musculus cDNA clone IMAGE:4218099 5', mRNA sequence.

ACCESSION BF583109

VERSION BF583109.1 GI:11656827

KEYWORDS EST.

SOURCE house mouse.

ORGANISM Mus musculus

REFERENCE 1 (bases 1 to 913)

AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.

TITLE National Institutes of Health, Mammalian Gene Collection (MGC)

JOURNAL Unpublished (1999)

COMMENT Contact: Robert Strausberg, Ph.D.
Email: cgapsb@mail.nih.gov
Tissue Procurement: Jeffrey E. Green, M.D.
cDNA Library Preparation: Life Technologies, Inc.
DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LNLN at: <http://image.lnl.gov>
Plate: L1AM9797 row: p column: 04
High quality sequence stop: 656.

FEATURES
source location/Qualifiers
1..913
/organism="Mus musculus"
/strain="FVB/N"
/db_xref="taxon:10090"
/clone="IMAGE:4218099"
/clone_1lb="NCI_CGAP_Co24"
/lab_host="DH10B (T1 phage-resistant)"
/note="Organ: colon; Vector: pCMV-SPORT6; Site:1: NotI; Site:2: SalI; Cloned unidirectionally. Primer: Oligo dT. Average insert size 1.6 kb. Constructed by Life Technologies. Note: this is a NCI_CGAP Library."

BASE COUNT 183 a 261 c 250 g 219 t

ORIGIN

Query Match 10.2%; Score 47; DB 11; Length 913;
Best Local Similarity 100.0%; Pred. No. 1.9e-13;
Matches 47; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 366 TGCTCTGACCTACTGGGCTCAAGAACCTGACCGCTCTCAG 412
|||||
Db 363 TGCTCTGACCTACTGGGCTCAAGAACCTGACCGCTCTCAG 429

RESULT 9

LOCUS AK002875 1384 bp mRNA HTC 05-JUL-2001

DEFINITION Mus musculus adult male kidney cDNA, RIKEN full-length enriched library, clone:0610041A01, full insert sequence.

ACCESSION AK002875

VERSION AK002875.1 GI:12833178

KEYWORDS CAP trapper.

SOURCE Mus musculus (strain:C57BL/6J) adult male kidney cDNA to mRNA, clone:0610041A01.

ORGANISM Mus musculus

REFERENCE 1 (bases 1 to 1384)

AUTHORS Carninci, P., Shibata, Y., Hayatsu, N., Sugahara, Y., Shibata, K., Itoh, M., Konno, H., Okazaki, Y., Muramatsu, M. and Hayashizaki, Y.

TITLE High-efficiency full-length cDNA cloning methods in enzymology. 303, 19-44 (1999)

JOURNAL Methods in enzymology. 303, 19-44 (1999)

MEDLINE 99279253

PUBMED 10349636

REFERENCE 2 (bases 1 to 1384)

AUTHORS Carninci, P., Shibata, Y., Hayatsu, N., Sugahara, Y., Shibata, K., Itoh, M., Konno, H., Okazaki, Y., Muramatsu, M. and Hayashizaki, Y.

TITLE Normalization and subtraction of cap-trapper-selected cDNAs to prepare full-length cDNA libraries for rapid discovery of new genes

JOURNAL Genome research. 10 (10), 1617-1630 (2000)

MEDLINE 20499374

PUBMED 11042159

REFERENCE 3 (bases 1 to 1384)

AUTHORS Shibata, K., Itoh, M., Aizawa, K., Nagaoka, S., Sasaki, N., Carninci, P., Konno, H., Akiyama, J., Nishikawa, T., Tashiro, H., Itoh, M., Sumi, N., Ishii, Y., Nakamura, S., Hazama, M., Nishine, T., Harada, A., Yamamoto, R., Matsumoto, H., Sakaguchi, S., Ikegami, T., Kashiwagi, K., Fujiwara, S., Inoue, K., Togawa, Y., Izawa, M., Ohara, E., Watabiki, M., Yoneda, Y., Ishikawa, T., Ozawa, K., Tanaka, T., Matsunaga, S., Kawai, J., Okazaki, Y., Muramatsu, M., Inoue, Y., Kira, A. and Hayashizaki, Y.

TITLE RIKEN integrated sequence analysis (RISA) system--384-format sequencing pipeline with 384 multichannel sequencer

JOURNAL Genome research. 10 (11), 1757-1771 (2000)

MEDLINE 20530913

PUBMED 11076661

REFERENCE 4 (bases 1 to 1384)

AUTHORS The RIKEN Genome Exploration Research Group Phase II Team and the

ORGANISM Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
1 (bases 1 to 560)
NIH-MGC <http://mgc.nci.nih.gov/>
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-remail.nih.gov
Tissue Procurement: Jeffrey E. Green, M.D.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
<http://image.llnl.gov>
Plate: LHAM9801 row: h column: 08
High quality sequence stop: 555.
Location/Qualifiers
1..560
/organism="Mus musculus"
/strain="FVB/N"
/db_xref="taxon:10090"
/clone_image="4219447"
/clone_lib="NCI_CGAP_Co24"
/lab_host="DH10B (T1 phage-resistant)"
/note="Organ: colon; Vector: PCMV-SPORT6; Site:1: NotI;
Site:2: SalI; Cloned unidirectionally. Primer: Oligo dt.
Average insert size 1.6 kb. Constructed by Life
Technologies. Note: this is a NCI_CGAP Library."
BASE COUNT 152 a 128 c 133 g 147 t
ORIGIN

Query Match 9.1%; Score 42; DB 11; Length 560;
Best Local Similarity 100.0%; Pred. No. 7e-11;
Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 371 TGGACTACTGGGGTCAAGAACCTCAGTCACCTCTCTCTCAG 412
|||||
Db 438 TGGACTACTGGGGTCAAGAACCTCAGTCACCTCTCTCTCAG 479

RESULT 12
LOCUS BE367979 604 bp mRNA EST 21-JUL-2000
DEFINITION 601221857E1 NCI_CGAP_Lu29 Mus musculus cDNA clone IMAGE:3590678 5',
mRNA sequence.
ACCESSION BE367979
VERSION BE367979.1 GI:9313342
KEYWORDS EST.
SOURCE house mouse.
ORGANISM Mus musculus.
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
1 (bases 1 to 604)
NIH-MGC <http://mgc.nci.nih.gov/>
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-remail.nih.gov
Tissue Procurement: Jeffrey E. Green, M.D.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
<http://image.llnl.gov>
Plate: LHAM8759 row: a column: 15
High quality sequence stop: 532.
Location/Qualifiers
1..604
/organism="Mus musculus"

FEATURES
source

/strain="CZECH II (feral)"
/db_xref="taxon:10090"
/clone_image="3590678"
/clone_lib="NCI_CGAP_Lu29"
/tissue_type="spontaneous tumor, metastatic to mammary.
Stem cell origin."
/lab_host="DH10B"
/note="Organ: lung; Vector: PCMV-SPORT6; Site:1: SalI;
Site:2: NotI; Cloned unidirectionally. Primer: Oligo dt.
Library constructed by Life Technologies. Investigator
providing samples: Gilbert Smith, NIH"
BASE COUNT 133 a 172 c 165 g 134 t
ORIGIN

Query Match 9.1%; Score 42; DB 10; Length 604;
Best Local Similarity 100.0%; Pred. No. 7.1e-11;
Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 371 TGGACTACTGGGGTCAAGAACCTCAGTCACCTCTCTCTCAG 412
|||||
Db 50 TGGACTACTGGGGTCAAGAACCTCAGTCACCTCTCTCTCAG 91

RESULT 13
LOCUS BF579001 650 bp mRNA EST 12-DEC-2000
DEFINITION 602096117F1 NCI_CGAP_Co24 Mus musculus cDNA clone IMAGE:4215844 5',
mRNA sequence.
ACCESSION BF579001
VERSION BF579001.1 GI:11652713
KEYWORDS EST.
SOURCE house mouse.
ORGANISM Mus musculus.
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
1 (bases 1 to 650)
NIH-MGC <http://mgc.nci.nih.gov/>
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-remail.nih.gov
Tissue Procurement: Jeffrey E. Green, M.D.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
<http://image.llnl.gov>
Plate: LHAM9792 row: b column: 05
High quality sequence stop: 649.
Location/Qualifiers
1..650
/organism="Mus musculus"
/strain="FVB/N"
/db_xref="taxon:10090"
/clone_image="4215844"
/clone_lib="NCI_CGAP_Co24"
/lab_host="DH10B (T1 phage-resistant)"
/note="Organ: colon; Vector: PCMV-SPORT6; Site:1: NotI;
Site:2: SalI; Cloned unidirectionally. Primer: Oligo dt.
Average insert size 1.6 kb. Constructed by Life
Technologies. Note: this is a NCI_CGAP Library."
BASE COUNT 154 a 177 c 165 g 154 t
ORIGIN

Query Match 9.1%; Score 42; DB 11; Length 650;
Best Local Similarity 100.0%; Pred. No. 7.1e-11;
Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 371 TGGACTACTGGGGTCAAGAACCTCAGTCACCTCTCTCTCAG 412
|||||

Db 433 TGGACTACTGGGGTCAAGAACTCAGTCACGCTCTCTCAG 474

RESULT 14
BG963642 666 bp mRNA EST 12-JUN-2001
DEFINITION 602828443F1 NCI_CGAP_Co24 Mus musculus cDNA clone IMAGE:4983155 5',
mRNA sequence.
ACCESSION BG963642
VERSION BG963642.1 GI:14351279
KEYWORDS EST.
SOURCE house mouse.
ORGANISM Mus musculus.
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
1 (bases 1 to 666)
NIH-MGC <http://mgc.nci.nih.gov/>.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgabs-remail.nih.gov
Tissue Procurement: Jeffrey E. Green, M.D.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
<http://image.llnl.gov>
Plate: LLAM10987 row: e column: 12
High quality sequence stop: 658.
Location/Qualifiers
1. 666
/organism="Mus musculus"
/strain="FVB/N"
/db_xref="taxon:10090"
/clone="IMAGE:4983155"
/clone_lib="NCI_CGAP_Co24"
/lab_host="DH10B (T1 phage-resistant)"
/note="Organ: colon; Vector: pCMV-SPORT6; Site_1: NotI;
Site_2: SalI; Cloned unidirectionally. Primer: Oligo dT.
Average insert size 1.6 kb. Constructed by Life
Technologies. Note: this is a NCI_CGAP library."

BASE COUNT 157 a 186 c 159 g 164 t
ORIGIN

Query Match 9.1%; Score 42; DB 11; Length 666;
Best Local Similarity 100.0%; Pred. No. 7.2e-11;
Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 371 TGGACTACTGGGGTCAAGAACTCAGTCACGCTCTCTCAG 412
|||||
Db 392 TGGACTACTGGGGTCAAGAACTCAGTCACGCTCTCTCAG 433
|||||

RESULT 15
BF182141 671 bp mRNA EST 31-OCT-2000
LOCUS BF182141
DEFINITION 601804682F1 NCI_CGAP_Mam5 Mus musculus cDNA clone IMAGE:4035429 5',
mRNA sequence.
ACCESSION BF182141
VERSION BF182141.1 GI:11060283
KEYWORDS EST.
SOURCE house mouse.
ORGANISM Mus musculus.
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
1 (bases 1 to 671)
NIH-MGC <http://mgc.nci.nih.gov/>.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgabs-remail.nih.gov

Tissue Procurement: Lothar Hennighausen Ph.D., Robin Humphreys
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
<http://image.llnl.gov>
Plate: LLAM9309 row: d column: 22
High quality sequence stop: 669.
Location/Qualifiers
1. 671
/organism="Mus musculus"
/strain="C57/B6"
/db_xref="taxon:10090"
/clone="IMAGE:4035429"
/clone_lib="NCI_CGAP_Mam5"
/tissue_type="tumor, gross tissue"
/dev_stage="7 months"
/lab_host="DH10B"
/note="Organ: mammary; Vector: pCMV-SPORT6; Site_1: SalI;
Site_2: NotI; Cloned unidirectionally. Primer: Oligo dT.
Library constructed by Life Technologies. Investigators
providing samples: Lothar Hennighausen/Robin Humphreys,
NIH"

BASE COUNT 173 a 177 c 164 g 157 t
ORIGIN

Query Match 9.1%; Score 42; DB 11; Length 671;
Best Local Similarity 100.0%; Pred. No. 7.2e-11;
Matches 42; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 371 TGGACTACTGGGGTCAAGAACTCAGTCACGCTCTCTCAG 412
|||||
Db 374 TGGACTACTGGGGTCAAGAACTCAGTCACGCTCTCTCAG 415
|||||

Search completed: February 21, 2002, 04:00:29
Job time: 26463 sec

GenCore version 4.5
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OM nucleic - nucleic search, using sw model

Run on: February 21, 2002, 04:25:14 ; Search time 1476.91 Seconds

(without alignments)
5149.400 Million cell updates/sec

Title: US-08-836-455-3

Perfect score: 461

Sequence: 1 ATGAATCAGCTGGCTCTT.....CTGTCCTCGAAGCTTGGG 461

Scoring table: OLIGO_NUC

Gapop 60.0 , Gapext 60.0

Searched: 147140 seqs, 8248589755 residues

Word size: 0

Total number of hits satisfying chosen parameters: 2944280

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Listing first 45 summaries

Database:

1:	gb_ba:*
2:	gb_htg:*
3:	gb_in:*
4:	gb_om:*
5:	gb_ov:*
6:	gb_pat:*
7:	gb_ph:*
8:	gb_pl:*
9:	gb_pr:*
10:	gb_ro:*
11:	gb_sts:*
12:	gb_sy:*
13:	gb_un:*
14:	gb_vi:*
15:	em_ba:*
16:	em_fun:*
17:	em_hum:*
18:	em_in:*
19:	em_om:*
20:	em_or:*
21:	em_ov:*
22:	em_pat:*
23:	em_ph:*
24:	em_pl:*
25:	em_ro:*
26:	em_sts:*
27:	em_sy:*
28:	em_un:*
29:	em_vi:*
30:	em_htgo_hum:*
31:	em_htgo_inv:*
32:	em_htgo_rod:*
33:	em_htg_hum:*
34:	em_htg_inv:*
35:	em_htg_rod:*
36:	em_htg_other:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB	ID	Description
1	407	88.3	411	10	AF124720	AF124720 Mus muscu
2	96	20.8	294	10	AF303872	AF303872 Mus muscu
3	83	18.0	735	12	SC0250760	AJ250760 Mus muscu
4	77	16.7	902	12	XXU49832	U49832 Synthetic s
5	76	16.5	458	6	AR083801	AR083801 Sequence
6	66	14.3	484	10	MUSIGHC11	M54977 Mus musculu
7	66	14.3	490	10	MUSIGHC11A	M24785 Mouse anti-
8	61	13.2	453	10	MM024114	U24114 Mus musculu
9	60	13.0	279	10	MMIGCVRB	225453 M.musculus
10	60	13.0	282	10	MMIGCVRB	225443 M.musculus
11	60	13.0	285	10	MMIGCVRC	225445 M.musculus
12	60	13.0	290	10	MMIGCVRF	225451 M.musculus
13	60	13.0	294	10	AF303873	AF303873 Mus muscu
14	60	13.0	302	10	MMIGCVRI	225447 M.musculus
15	60	13.0	303	10	MMIGCVRD	225449 M.musculus
16	60	13.0	305	10	MMIGCVRE	225449 M.musculus
17	60	13.0	352	10	MMMD50C	273339 M.musculus
18	60	13.0	355	10	MMMD47C	273342 M.musculus
19	60	13.0	358	10	MMMD01C	273357 M.musculus
20	60	13.0	358	10	MMMD52C	273338 M.musculus
21	60	13.0	360	12	AF277091	AF277091 Synthetic
22	60	13.0	765	6	AX057984	AX057984 Sequence
23	60	13.0	765	6	AX057985	AX057985 Sequence
24	60	13.0	959	10	AF025445	AF025445 Mus muscu
25	60	13.0	1239	6	AX057945	AX057945 Sequence
26	60	13.0	1280	6	AX057947	AX057947 Sequence
27	59	12.8	360	6	I73511	I73511 Sequence 14
28	59	12.8	368	10	MMEAD24	X97535 M.musculus
29	59	12.8	381	10	S72514	S72514 anti-estradi
30	59	12.8	384	10	MUSIGHVALA	M97861 Mouse hybrid
31	59	12.8	390	10	MUSL77IGHV	M97876 Mouse hybrid
32	59	12.8	396	10	AY028960	AY028960 Mus muscu
33	59	12.8	399	10	MM0252270	AJ252270 Mus muscu
34	59	12.8	401	6	A18395	A18395 Human uPA c
35	59	12.8	414	10	AF006832	AF006832 Mus muscu
36	59	12.8	420	10	MMIG156V	X56382 Mouse mAB-1
37	59	12.8	444	10	MUSIGHHB	M13330 Mouse Ig ga
38	59	12.8	447	6	E26040	E26040 Peptide fra
39	59	12.8	458	6	I05921	I05921 Sequence 37
40	59	12.8	458	6	I08811	I08811 Sequence 12
41	59	12.8	458	6	I09199	I09199 Sequence 38
42	59	12.8	458	10	MUSIGHXW	M17953 Mouse Ig re
43	59	12.8	470	6	AR059286	AR059286 Sequence
44	59	12.8	477	6	AR080860	AR080860 Sequence
45	59	12.8	480	10	MUSIGHHP	M16163 Mouse Ig ga

ALIGNMENTS

RESULT	1	LOCUS	AF124720	411 bp	mRNA	ROD	22-MAY-2001
DEFINITION			Mus musculus immunoglobulin heavy chain mRNA, partial cds.				
ACCESSION			AF124720				
VERSION			AF124720.1	GI:14164544			
KEYWORDS							
SOURCE			house mouse.				
ORGANISM			Mus musculus				
REFERENCE			Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.				
AUTHORS			1 (bases 1 to 411) Tripathi,P.K., Qin,H., Bhattacharya-Chatterjee,M., Ceriani,R.L., Foon,K.A. and Chatterjee,S.K.				
TITLE			Construction and characterization of a chimeric fusion protein consisting of an anti-idiotypic antibody mimicking a breast cancer-associated antigen and the cytokine GM-CSF				
JOURNAL			Hybridoma 18 (2), 193-202 (1999)				
MEDLINE			99306687				
PUBMED			10380019				

REFERENCE 2 (bases 1 to 411)
 AUTHORS Chatterjee,S.K. and Tripathi,P.K.
 TITLE Direct Submission
 JOURNAL Submitted (29-JAN-1999) Internal Medicine, University of Kentucky,
 800 Rose Street, Lexington, KY 40536, USA

FEATURES
 source
 1. 411
 /organism="Mus musculus"
 /strain="BALB/c"
 /db_xref="taxon:10090"
 1. >411
 /note="anti-idiotypic antibody 11D10: mimics a breast
 cancer-associated antigen, human fat globule (HMFg)"
 /product="immunoglobulin heavy chain"
 /protein_id="AAK55119.1"
 /db_xref="GI:14164545"
 /translation="MKCSWFLFLSLITTTGHSQAYLQSGAEIYRSGASVMSCKAS
 GTLTSTNNHWKQTPGGGLEWIGNIPFGNGDTYNNQFKGASLTADTSSSTAYWQI
 SLLTSEDVAVYFCARGNMGALDYMGGQSVTVSS"

BASE COUNT 102 a 101 c 107 g 101 t

ORIGIN

Query Match 88.3%; Score 407; DB 10; Length 411;
 Best Local Similarity 100.0%; Pred. No. 1.3e-229;
 Matches 407; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

-QY 5 AATGCAAGCGGCTCTTCTCTCCCTGTCATACATACAGGTGCCATCCAGGCTT 64
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 Db 5 AATGCAAGCGGCTCTTCTCTCTCCCTGTCATACATACAGGTGCCATCCAGGCTT 64
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||

QY 65 ACTTACAGCAGTCTGGGGCTGAGCTGTGAGCTCTGGGCTCATGTAAGATGCTGCA 124
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 Db 65 ACTTACAGCAGTCTGGGGCTGAGCTGTGAGCTCTGGGCTCATGTAAGATGCTGCA 124
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||

QY 125 AGGCTTCTGGCTACACATTTGACATTTACATATGCACTGGGTAAGACAGACCTGGAC 184
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 Db 125 AGGCTTCTGGCTACACATTTGACATTTGACATTTGCACTGGGTAAGACAGACCTGGAC 184
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||

QY 185 AGGGCTGGAATGGATTTGAAATATTTCTCGGAATGGTGTACTTCTCAATCAACA 244
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 Db 185 AGGGCTGGAATGGATTTGAAATATTTCTCGGAATGGTGTACTTCTCAATCAACA 244
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||

QY 245 AGTTAAGGCAAGGCTCATTTGATGACAGACATCTCCAGCAGGCTCATCATGACA 304
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 Db 245 AGTTAAGGCAAGGCTCATTTGATGACAGACATCTCCAGCAGGCTCATCATGACA 304
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||

QY 305 TCAGCAGCTGACATCTGAAGACTGTGCGTCTATTCTGTGCAAGAGGGAACCTGGAGG 364
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 Db 305 TCAGCAGCTGACATCTGAAGACTGTGCGTCTATTCTGTGCAAGAGGGAACCTGGAGG 364
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||

QY 365 GTGCTCTGACATCTGAGGCTCAAGGAACCTGACGCTCTCTCTCA 411
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 Db 365 GTGCTCTGACATCTGAGGCTCAAGGAACCTGACGCTCTCTCTCA 411
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||

RESULT 2
 AF303872 294 bp mRNA ROD 10-DEC-2000
 LOCUS Mus musculus clone j558.41 immunoglobulin heavy chain variable
 DEFINITION region mRNA, partial cds.
 ACCESSION AF303872
 VERSION AF303872.1 GI:11612050
 KEYWORDS
 SOURCE house mouse.
 ORGANISM Mus musculus
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 Haines,B.B., Angeles,C.V., Parmelee,A.P., McLean,P.A. and
 Brodeur,P.H.
 TITLE Germ-line diversity of the expressed BALB/c VhJ558 gene family

JOURNAL Unpublished
 REFERENCE 2 (bases 1 to 294)
 AUTHORS Haines,B.B., Angeles,C.V., Parmelee,A.P., McLean,P.A. and
 Brodeur,P.H.
 TITLE Direct Submission
 JOURNAL Submitted (08-SEP-2000) Pathology, Tufts University School of
 Medicine, 136 Harrison Avenue, Boston, MA 02111, USA

FEATURES
 source
 1. 294
 /organism="Mus musculus"
 /strain="BALB/cByJ"
 /db_xref="taxon:10090"
 /chromosome="12"
 /clone="j558.41"
 /tissue_type="spleen"
 /note="isolated from Igm mRNA from
 11popolysaccharide-stimulated cells"
 <1. .>294
 /note="VhJ558 family"
 /codon_start=1
 /product="immunoglobulin heavy chain variable region"
 /protein_id="AAG39153.1"
 /db_xref="GI:11612051"
 /translation="QAYLQSGAEIYRSGASVMSCKASGTTFTSYNNHWKQTPGG
 LEWIGYIYPNGTNYNNQFKGASLTADTSSSTAYWQISSLTSEDVAVYFCAR"

BASE COUNT 79 a 69 c 77 g 69 t

ORIGIN

Query Match 20.8%; Score 96; DB 10; Length 294;
 Best Local Similarity 99.3%; Pred. No. 2.8e-45;
 Matches 146; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 58 CAGGCTTATCTACAGAGTCTGGGCTGAGCTGAGCTGAGGCTGGGGCTCAGTAAGANG 117
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 Db 1 CAGGCTTATCTACAGAGTCTGGGCTGAGCTGAGCTGAGGCTGGGGCTCAGTAAGANG 60
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||

QY 118 TCCTGCAAGGCTTCTGCTACACATTTGACATTTACATATGCACTGGGTAAGACAGACA 177
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 Db 61 TCCTGCAAGGCTTCTGCTACACATTTTACACATTTACATATGCACTGGGTAAGACAGACA 120
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||

QY 178 CCTGCAAGGCTTCTGCAATGATTTGA 204
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
 Db 121 CCTGCAAGGCTTCTGCAATGATTTGA 147
 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||

RESULT 3
 SC0250760 735 bp mRNA SYN 11-MAY-2000
 LOCUS Mus musculus synthetic construct for anti-guinea pig C5 scfv
 DEFINITION antibody, clone E10.
 ACCESSION AJ250760
 VERSION AJ250760.1 GI:6272272
 KEYWORDS antibody; heavy chain; immunoglobulin superfamily; light chain;
 scfv; variable region.
 SOURCE synthetic construct.
 ORGANISM artificial sequence.
 REFERENCE 1 (bases 1 to 735)
 AUTHORS Link,C., Hawlisch,H., Meyer zu Vilsendorf,A., Gylerez,S., Nagel,E.
 and Koehl,J.
 TITLE Selection of phage-displayed anti-guinea pig C5 or C5a antibodies
 and their application in xenotransplantation
 JOURNAL Mol. Immunol. 38, 1235-1247 (1999)
 REFERENCE 2 (bases 1 to 735)
 AUTHORS Link,C.
 TITLE Direct Submission
 JOURNAL Submitted (01-NOV-1999) Link C., Medizinische Mikrobiologie,
 Medizinische Hochschule Hannover, Carl-Neuberg-Str. 1, 30625
 Hannover, GERMANY
 FEATURES
 source
 1. 735
 /organism="synthetic construct"

Query Match 18.0%; Score 83; DB 12; Length 735;
Best Local Similarity 100.0%; Pred. No. 1.4e-37;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

DB 263 CATTGACTGACACATCTCTCCAGCAGCAGCTACATGACGATCAGACGCTGACATCTG 322
|||||
DB 206 CATTGACTGACACATCTCTCCAGCAGCAGCTACATGACGATCAGACGCTGACATCTG 265
|||||

QY 323 AAGACTCTGGGCTCTATTCTGT 345
|||||

DB 266 AAGACTCTGGGCTCTATTCTGT 288
|||||

RESULT 4
LOCUS XXU49832 902 bp mRNA SYN 24-MAR-1996
DEFINITION Synthetic single chain Fv antibody against potato virus V coat
protein, mRNA, partial cds.
ACCESSION U49832
VERSION U49832.1 GI:1236090
KEYWORDS
SOURCE synthetic construct.
ORGANISM synthetic construct.
REFERENCE 1 (bases 1 to 902)
AUTHORS Chen, Z.C., Cockburn, W., Torrance, L., Barker, H. and Whitelam, G.C.
TITLE Cytoplasmic accumulation of a soluble functional scfv protein to a
plant virus expressed as a thioredoxin fusion in Escherichia coli
JOURNAL Unpublished
2 (bases 1 to 902)
REFERENCE Chen, Z.C., Cockburn, W., Torrance, L., Barker, H. and Whitelam, G.C.
AUTHORS Direct Submission
TITLE Submitted (23-FEB-1996) Z C. Chen, Botany, Univ. of Leicester,
JOURNAL University Road, Leicester LE1 7RH, UK
FEATURES
source 1..902
/organism="synthetic construct"
/db_xref="taxon:32630"
/note="PCR synthesized gene from mouse hybridoma cell line"

BASE COUNT 194 a 170 c 206 g 165 t
ORIGIN

source /organism="Mus musculus"
/db_xref="taxon:10090"
V_region 1..366
/product="immunoglobulin heavy chain variable region"
source 1..366
/organism="Mus musculus"
/db_xref="taxon:10090"
misc_feature 367..411
/note="(Gly4Ser)3 linker sequence"
V_region 412..735
/product="immunoglobulin light chain variable region"
source 412..735
/organism="Mus musculus"
/db_xref="taxon:10090"

Query Match 16.7%; Score 77; DB 12; Length 902;
Best Local Similarity 99.2%; Pred. No. 5.1e-34;
Matches 127; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 77 CTGGGCTGAGCTGCTGAGCTCTGGGCTCAGTGAAGATGCTCGAAGCTTCTGCT 136
|||||

DB 452 CTGGGCTGAGCTGCTGAGCTCTGGGCTCAGTGAAGATGCTCGAAGCTTCTGCT 511
|||||

QY 137 ACACATTGACACGTTACATATGCTGCTGGAAGCAGACACCTGACAGGCTTGAAT 196
|||||

DB 512 ACACATTGACACGTTACATATGCTGCTGGAAGCAGACACCTGACAGGCTTGAAT 571
|||||

QY 197 GGATTGGA 204
|||||

DB 572 GGATTGGA 579
|||||

RESULT 5
LOCUS AR083801 458 bp DNA PAT 01-SEP-2000
DEFINITION Sequence 3 from patent US 5977316.
ACCESSION AR083801
VERSION AR083801.1 GI:10010572
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 458)
AUTHORS Chatterjee, M., Foon, K.A. and Chatterjee, S.K.
TITLE Monoclonal antibody 1A7 and related polypeptides
JOURNAL Patent: US 5977316-A 3 02-NOV-1999;
FEATURES
source 1..458
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BASE COUNT 106 a 131 c 114 g 107 t
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Query Match 16.5%; Score 76; DB 6; Length 458;
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Matches 76; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 366 TGCTCTGAGTACTGAGGCTCAAGACCTCAGTACCGCTCTCTCAGCAAAAGACACC 425
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DB 363 TGCTCTGAGTACTGAGGCTCAAGACCTCAGTACCGCTCTCTCAGCAAAAGACACC 422
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QY 426 CCCACCCGCTTATCA 441
|||||

DB 423 CCCACCCGCTTATCA 438
|||||

RESULT 6
LOCUS MUSIGH4C11 484 bp mRNA ROD 12-JUN-2000
DEFINITION Mus musculus immunoglobulin heavy chain precursor (IGH) mRNA,
partial cds.

ACCESSION M54977
 VERSION M54977.1 GI:194528
 KEYWORDS C-region; V-region; immunoglobulin heavy chain.
 SOURCE Mouse anti-idiotypic hybridoma cell line 4C11, cDNA to mRNA.
 ORGANISM Mus musculus
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 1 (bases 1 to 484)
 Sood, A.K., Cheng, H.L., and Kohler, H.
 TITLE An efficient and general method for sequencing immunoglobulin mRNAs
 JOURNAL J. Immunol. Methods 95 (2), 227-235 (1986)
 MEDLINE 87084812
 FEATURES
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 Matches 66; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 364 GGCTCTGGACTACTGGGGTCAAGACCTGACCGTCTCTCTCAGCCAAAGCACA 423
 Db 397 GGCTCTGGACTACTGGGGTCAAGACCTGACCGTCTCTCAGCCAAAGCACA 456
 QY 424 CCCCCA 429
 Db 457 CCCCCA 462
 RESULT 7
 MUSIG4C11A
 LOCUS Mouse anti-idiotypic immunoglobulin heavy chain variable, constant,
 DEFINITION and complementarity determining regions 1-3 (4C11) mRNA.
 ACCESSION M24785
 VERSION M24785.1 GI:194133
 KEYWORDS C-region; V-region; anti-idiotypic antibody; complementarity
 determining region; immunoglobulin heavy chain.
 SOURCE Mus musculus (strain BALB/c, sub-species domesticus) cDNA to mRNA.
 ORGANISM Mus musculus
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 1 (bases 1 to 490)
 Cheng, H.-L., Sood, A.K., Ward, R.E., Kleber-Emmons, T., and Kohler, H.
 TITLE Structural basis of stimulatory anti-idiotypic antibodies
 JOURNAL Mol. Immunol. 25, 33-40 (1988)
 MEDLINE 88142863
 FEATURES
 Location/Qualifiers

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 /note="complementarity determining region"
 388..411
 /gene="CDR3"
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 Best Local Similarity 100.0%; Pred. No. 1.7e-27;
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 Db 397 GGCTCTGGACTACTGGGGTCAAGACCTGACCGTCTCTCAGCCAAAGCACA 456
 QY 424 CCCCCA 429
 Db 457 CCCCCA 462
 RESULT 8
 MMU24114
 LOCUS MMU24114 453 bp mRNA ROD 20-APR-1995
 DEFINITION Mus musculus immunoglobulin F9.13.7 heavy chain mRNA, partial cds.
 ACCESSION U24114
 VERSION U24114.1 GI:777410
 KEYWORDS house mouse.
 SOURCE Mus musculus
 ORGANISM Mus musculus
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 1 (bases 1 to 453)
 Lescar, J., Pellegrini, M., Souchon, H., Tello, D., Poljak, R.J.,
 Peterson, N.C., Greene, M.I., and Alzari, P.M.
 TITLE Crystal structure of a cross-reaction complex between Fab F9.13.7
 and Guinea-fowl lysozyme
 JOURNAL J. Biol. Chem. (1995) In press
 REFERENCE 2 (bases 1 to 453)
 TITLE Direct Submission
 JOURNAL Submitted (03-APR-1995) Norman C. Peterson, Pathology and
 Laboratory Medicine, University of Pennsylvania School of Medicine,
 252 John Morgan Bldg., 36th St. and Hamilton Walk, Philadelphia, PA
 19104, USA
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 Db 300 TCTGACTACTGGGTCACAGACCTCAGTCCGTCCTCCAGCCAAACGACACCC 359
 QY 429 A 429
 Db 360 A 360

RESULT 9
 LOCUS MMIGCVRG 279 bp mRNA ROD 13-OCT-1993
 DEFINITION M.musculus immunoglobulin gamma heavy chain (DBA/1) gene, v region.
 ACCESSION Z25453
 VERSION 225453.1 GI:407822
 KEYWORDS heavy chain; IgG gene; immunoglobulin; variable region.
 SOURCE house mouse.
 ORGANISM Mus musculus.
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 REFERENCE 1 (bases 1 to 279)
 AUTHORS Mo,J.A., Bona,C.A. and Holmdahl,R.
 TITLE Variable region gene selection of immunoglobulin G-expressing B
 cells with specificity for a defined epitope on type II collagen
 Eur. J. Immunol. (1993) In press
 JOURNAL 2 (bases 1 to 279)
 REFERENCE Mo,J.A.
 AUTHORS Direct Submission
 TITLE Submitted (02-AUG-1993) John A Mo, Department of Medical and
 JOURNAL Physiological, Department of, Medical and Physiological Chemistry,
 MEDLINE Husargatan 3, Uppsala, 75123, Sweden
 PUBMED 94009207
 FEATURES 7691608
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 BASE COUNT 76 a 66 c 77 g 60 t
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 Best Local Similarity 100.0%; Pred. No. 6.1e-24;
 Matches 60; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 145 ACCAGTTACATATGCGCTGGTAAAGCAGACACCTGGACAGGCGCGAATGATGGA 204
 |||||||
 Db 67 ACCAGTTACATATGCGCTGGTAAAGCAGACACCTGGACAGGCGCGAATGATGGA 126

RESULT 10
 LOCUS MMIGCVRB 282 bp mRNA ROD 13-OCT-1993
 DEFINITION M.musculus immunoglobulin gamma heavy chain (DBA/1) gene, v region.
 ACCESSION Z25443
 VERSION 225443.1 GI:407812
 KEYWORDS heavy chain; IgG gene; immunoglobulin; variable region.
 SOURCE house mouse.
 ORGANISM Mus musculus.
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 REFERENCE 1 (bases 1 to 282)
 AUTHORS Mo,J.A., Bona,C.A. and Holmdahl,R.
 TITLE Variable region gene selection of immunoglobulin G-expressing B
 cells with specificity for a defined epitope on type II collagen
 Eur. J. Immunol. (1993) In press
 JOURNAL 2 (bases 1 to 282)
 REFERENCE Mo,J.A.
 AUTHORS Direct Submission
 TITLE Submitted (02-AUG-1993) John A Mo, Department of Medical and
 JOURNAL Physiological, Department of, Medical and Physiological Chemistry,
 MEDLINE Husargatan 3, Uppsala, 75123, Sweden
 PUBMED 94009207
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Best Local Similarity 100.0%; Pred. No. 6.1e-24;
Matches 60; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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|||||
Db 67 ACCAGTTACATATATGCACTGGGTTAAAGCAGACACCTGGACAGGCGCTGGAATGATTGA 126

RESULT 11

LOCUS MMIGCVRC 285 bp mRNA 13-OCT-1993
DEFINITION M.musculus immunoglobulin gamma heavy chain (DBA/1) gene, v region.
ACCESSION Z25445
VERSION Z25445.1 GI:407814
KEYWORDS heavy chain; Igg gene; immunoglobulin; variable region.
SOURCE house mouse.
ORGANISM Mus musculus

REFERENCE 1 (bases 1 to 285)
AUTHORS Mo,J.A., Bona,C.A. and Holmdahl,R.
TITLE Variable region gene selection of immunoglobulin G expressing B cells with specificity for a defined epitope on type II collagen

JOURNAL Eur. J. Immunol. (1993) In press
REFERENCE 2 (bases 1 to 285)
AUTHORS Mo,J.A.
TITLE Direct Submission

JOURNAL Submitted (02-AUG-1993) John A Mo, Department of Medical and
AUTHORS Physiological, Department of, Medical and Physiological Chemistry,
Husargatan 3, Uppsala, 75123, Sweden

REFERENCE

AUTHORS Mo,J.A., Bona,C.A. and Holmdahl,R.
TITLE 3 (bases 1 to 285)

JOURNAL Variable region gene selection of immunoglobulin G-expressing B
MEDLINE cells with specificity for a defined epitope on type II collagen
PUBMED European Journal of Immunology. 23 (10), 2503-2510 (1993)
7691608

FEATURES
source Location/Qualifiers
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ORIGIN

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Db 67 ACCAGTTACATATATGCACTGGGTTAAAGCAGACACCTGGACAGGCGCTGGAATGATTGA 126

RESULT 12

LOCUS MMIGCVRF 290 bp mRNA 13-OCT-1993
DEFINITION M.musculus immunoglobulin gamma heavy chain (DBA/1) gene, v region.
ACCESSION Z25451
VERSION Z25451.1 GI:407820
KEYWORDS heavy chain; Igg gene; immunoglobulin; variable region.
SOURCE house mouse.
ORGANISM Mus musculus

REFERENCE 1 (bases 1 to 290)
AUTHORS Mo,J.A., Bona,C.A. and Holmdahl,R.
TITLE Variable region gene selection of immunoglobulin G expressing B cells with specificity for a defined epitope on type II collagen

JOURNAL Eur. J. Immunol. (1993) In press
REFERENCE 2 (bases 1 to 290)
AUTHORS Mo,J.A.
TITLE Direct Submission

JOURNAL Submitted (02-AUG-1993) John A Mo, Department of Medical and
AUTHORS Physiological, Department of, Medical and Physiological Chemistry,
Husargatan 3, Uppsala, 75123, Sweden

REFERENCE 3 (bases 1 to 290)
AUTHORS Mo,J.A., Bona,C.A. and Holmdahl,R.
TITLE Variable region gene selection of immunoglobulin G-expressing B cells with specificity for a defined epitope on type II collagen

JOURNAL European Journal of Immunology. 23 (10), 2503-2510 (1993)
MEDLINE 7691608
PUBMED

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source Location/Qualifiers
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ORIGIN

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|||||
Db 67 ACCAGTTACATATATGCACTGGGTTAAAGCAGACACCTGGACAGGCGCTGGAATGATTGA 126

RESULT 13

LOCUS AF303873 294 bp mRNA 10-DEC-2000

DEFINITION Mus musculus clone J558.42 immunoglobulin heavy chain variable region mRNA, partial cds.

ACCESSION AF303873

VERSION AF303873.1 GI:11612052

KEYWORDS house mouse.

SOURCE Mus musculus

ORGANISM Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

REFERENCE 1 (bases 1 to 294)

AUTHORS Haines, B.B., Angeles, C.V., Parmelee, A.P., McLean, P.A. and Brodeur, P.H.

TITLE Germline diversity of the expressed BALB/c VHJ558 gene family

JOURNAL Unpublished

REFERENCE 2 (bases 1 to 294)

AUTHORS Haines, B.B., Angeles, C.V., Parmelee, A.P., McLean, P.A. and Brodeur, P.H.

TITLE Direct Submission

JOURNAL Submitted (08-SEP-2000) Pathology, Tufts University School of Medicine, 136 Harrison Avenue, Boston, MA 02111, USA

FEATURES

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BASE COUNT 80 a 73 c 78 g 63 t

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Db 88 ACCAGTTACATATGACGTGGTAAAGCAGACACCTGGAGCGCTGGATTGATGGA 147

RESULT 14

MMIGGCVRI 302 bp mRNA ROD 13-OCT-1993

LOCUS M.musculus immunoglobulin gamma heavy chain (DBA/1) gene, v region. 225447

ACCESSION 225447.1 GI:407826

VERSION heavy chain; Igg gene; immunoglobulin; variable region.

KEYWORDS house mouse.

SOURCE Mus musculus

ORGANISM Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

REFERENCE 1 (bases 1 to 302)

AUTHORS Mo, J.A., Bona, C.A. and Holmdahl, R.

TITLE Variable region gene selection of immunoglobulin G expressing B cells with specificity for a defined epitope on type II collagen Eur. J. Immunol. (1993) In press

JOURNAL 2 (bases 1 to 302)

REFERENCE Mo, J.A.

AUTHORS Direct Submission

TITLE Submitted (02-AUG-1993) John A Mo, Department of Medical and Physiological, Department of, Medical and Physiological Chemistry, Husargatan 3, Uppsala, 75123, Sweden

REFERENCE 3 (bases 1 to 302)

AUTHORS Mo, J.A., Bona, C.A. and Holmdahl, R.

TITLE Variable region gene selection of immunoglobulin G-expressing B cells with specificity for a defined epitope on type II collagen European Journal of Immunology. 23 (10), 2503-2510 (1993)

JOURNAL 94009207

MEDLINE 7691608

PUBMED

FEATURES

source 1..302

Location/Qualifiers

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RESULT 15

MMIGGCVRI 303 bp mRNA ROD 13-OCT-1993

LOCUS M.musculus immunoglobulin gamma heavy chain (DBA/1) gene, v region. 225447

ACCESSION 225447.1 GI:407816

VERSION heavy chain; Igg gene; immunoglobulin; variable region.

KEYWORDS house mouse.

SOURCE Mus musculus

ORGANISM Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

REFERENCE 1 (bases 1 to 303)

AUTHORS Mo, J.A., Bona, C.A. and Holmdahl, R.

TITLE Variable region gene selection of immunoglobulin G expressing B cells with specificity for a defined epitope on type II collagen Eur. J. Immunol. (1993) In press

JOURNAL 2 (bases 1 to 303)

REFERENCE Mo, J.A.

AUTHORS Direct Submission

TITLE Submitted (02-AUG-1993) John A Mo, Department of Medical and Physiological, Department of, Medical and Physiological Chemistry, Husargatan 3, Uppsala, 75123, Sweden

JOURNAL 3 (bases 1 to 303)

REFERENCE Mo, J.A., Bona, C.A. and Holmdahl, R.

TITLE Variable region gene selection of immunoglobulin G-expressing B cells with specificity for a defined epitope on type II collagen European Journal of Immunology. 23 (10), 2503-2510 (1993)

JOURNAL 94009207

MEDLINE 7691608

PUBMED

FEATURES

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Location/Qualifiers

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GenCore version 4.5
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(Without alignments)
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Gapop 60.0 , Gapext 60.0

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Post-processing: Listing first 45 summaries

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10: /SIDS2/gcgdata/geneseq/geneseqn/NA1989.DAT.*
11: /SIDS2/gcgdata/geneseq/geneseqn/NA1990.DAT.*
12: /SIDS2/gcgdata/geneseq/geneseqn/NA1991.DAT.*
13: /SIDS2/gcgdata/geneseq/geneseqn/NA1992.DAT.*
14: /SIDS2/gcgdata/geneseq/geneseqn/NA1993.DAT.*
15: /SIDS2/gcgdata/geneseq/geneseqn/NA1994.DAT.*
16: /SIDS2/gcgdata/geneseq/geneseqn/NA1995.DAT.*
17: /SIDS2/gcgdata/geneseq/geneseqn/NA1996.DAT.*
18: /SIDS2/gcgdata/geneseq/geneseqn/NA1997.DAT.*
19: /SIDS2/gcgdata/geneseq/geneseqn/NA1998.DAT.*
20: /SIDS2/gcgdata/geneseq/geneseqn/NA1999.DAT.*
21: /SIDS2/gcgdata/geneseq/geneseqn/NA2000.DAT.*
22: /SIDS2/gcgdata/geneseq/geneseqn/NA2001.DAT.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	435	100.0	435	18	AA785149
2	435	100.0	435	20	AAV83772
3	102	23.4	387	18	AA77851
4	100	23.0	276	20	AAK00879
5	100	23.0	276	20	AAK00875
6	100	23.0	450	4	AAK0165
7	93	21.4	535	19	AAV20086
8	90	20.7	438	16	AAQ90431
9	85	19.5	642	18	AA785091
10	85	19.5	651	21	AAA44346
11	85	19.5	652	17	AA787818

12	85	19.5	678	21	AA27849
13	85	19.5	723	16	AAQ2503
14	85	19.5	738	21	AA261037
15	84	19.3	639	10	AAW91657
16	83	19.1	465	16	AAQ85387
17	82	18.9	324	21	AA249534
18	82	18.9	407	21	AA249548
19	82	18.9	711	21	AA249542
20	82	18.9	729	21	AA249543
21	81	18.6	882	14	AAQ48038
22	79	18.2	426	22	AAQ3177
23	79	18.2	438	18	AA70809
24	79	18.2	537	12	AAQ14801
25	79	18.2	537	12	AAQ14801
26	78	17.9	366	13	AAQ27140
27	78	17.9	451	21	AAQ43470
28	73	16.8	321	21	AA38909
29	73	16.8	456	22	AAQ6996
30	73	16.8	867	22	AAQ67002
31	70	16.1	360	18	AA796344
32	70	16.1	1848	18	AA796346
33	64	14.7	363	19	AAV13951
34	64	14.7	363	21	AA37832
35	64	14.7	363	22	AAQ6542
36	62	14.3	321	16	AAQ97504
37	62	14.3	321	16	AAQ97507
38	62	14.3	321	16	AAQ97510
39	61	14.0	321	21	AA38908
40	61	14.0	739	14	AAQ46084
41	61	14.0	739	17	AAQ46880
42	61	14.0	739	19	AAV21758
43	61	14.0	739	20	AAV63359
44	57	13.1	447	17	AA731332
45	57	13.1	447	20	AA31365

ALIGNMENTS

RESULT 1	
AA785149	
ID	AA785149 standard; cDNA; 435 BP.
XX	
AC	AA785149;
XX	
DT	04-JAN-1998 (first entry)
XX	
DE	Murine monoclonal anti-idiotype antibody 11D10 VL cDNA.
XX	
KW	Monoclonal antibody 11D10; anti-idiotype antibody; mucin.
KW	human milk fat globule; HMF; tumour; breast cancer; vaccine; ss.
XX	
OS	Mus musculus.
XX	
FH	Key
FT	sig_peptide
FT	Location/Qualifiers
FT	1..60
FT	/*tag= a
FT	61..435
FT	mat_peptide
FT	/*tag= b
XX	
PN	W09722699-A2.
XX	
PD	26-JUN-1997.
XX	
PF	19-DEC-1996; 96WO-US20757.
XX	
PR	13-DEC-1996; 96US-0575762.
PR	20-DEC-1996; 96US-0575762.
XX	
PA	26-JAN-1996; 96US-0591965.
XX	
PI	(KENT) UNIV KENTUCKY.
	Chatterjee M, Chatterjee SK, Foon KA;

W09-1 Feb light ch
Mouse antibody F4-
Nucleotide sequenc
Chimeric antibody
Mab 4197X light ch
Mouse anti-IL-18 a
Mouse light chain
p53Fv#125-2H reco
p53Fv#125-2H HT T
Monoclonal antibod
Murine antibody 1D
Mouse anti-idiotyp
Encodes murine ant
Re-5-D6 anti-ICAM-
ICAM-1 inhibiting
Mouse secreted exp
650E2 hybridoma VL
Filamentous phage
Filamentous phage
cDNA for Ig light
Chimeric gene cont
Mouse J591 monoclo
J591 monoclonal an
Murine monoclonal
Light chain variab
Light chain variab
520C9 hybridoma VL
Sequence encoding
520C9 anti-c-erbB-
520C9 anti-c-erbB-
520C9 sFV DNA sequ
Anti-idiotype mono
Mab 1A7 light chal

XX WPI; 1997-341690/31.
DR P-PSDB; AAM27119.
XX Monoclonal anti-Idiotypic antibody 11D10 - elicits immune response
PT against human milk fat globule disease associated tumours,
PT especially breast cancer
XX
XX
PS Claim 11: Page 94; 130pp; English.
XX
XX This CDNA sequence encodes the light chain variable region VL
CC (AAM65149) of monoclonal anti-Idiotypic antibody 11D10 produced by
CC hybridoma cell line ATCC 1020. 11D10 was obtained by immunising
CC naive mice with WC-10 anti-HMGF antibody to obtain an anti-Idiotypic
CC response. It elicits an immune response against a specific epitope
CC of a high mol. wt. mucin of human milk fat globule (HMGF). It
CC induces an immunological response to HMGF in mice, rabbits, monkeys
CC and patients with advanced HMGF-associated tumours. Pharmaceutical
CC compositions and vaccines comprising 11D10, 11D10 polypeptides
CC and/or 11D10 polynucleotides are claimed. Also claimed are
CC diagnostic kits and methods of using 11D10, 11D10 polypeptides
CC and/or 11D10 polynucleotides, including methods of treating HMGF-
CC associated tumours.
XX
XX Sequence 435 BP; 100 A; 111 C; 102 G; 122 T; 0 other;

Query Match	100.0%	Score 435;	DB 18;	Length 435;
Best Local Similarity	100.0%;	Pred. No. 3.3e-210;		
Matches 435; Conservative	0;	Mismatches	0;	Gaps 0

	AAV83772	AAV83772 standard; cDNA; 435 BP.	
OY	1 ATGGGGGGCCCTGGCCAGATTCTTGGGGTCTGTGGTCCTTGGTTCAGGATGACAGATGT	60	
Db	1 atggggggccctgctcagatctctgggtctgtgtctctgtctctgtctccagtaacagatgt	60	
OY	61 GACATCCGATGACCCAGCTCCATCCCTCTTATCTGCCTCTCGGAGCAAAAGATCAGT	120	
Db	61 gacatccagatgacccagctcccatccctctctatctgcctctctggaacaagatcagt	120	
OY	121 CTCACCTTGTGGGGCAAGTCAGACATTTGGTTATTAATTACATTGGCTTCAGCGAGAACCA	180	
Db	121 ctccactgtcgggcaagtcagacatctgttaacttaacttaactgtgtcttcagcaagaacca	180	
OY	181 GATGGAACCTATTAAACGCGCTGATCTACGCCACATCCAGTTTAGTTCGTGCCCAAA	240	
Db	181 gatggaactattaaacgcctgatctacgccacatccagtttagttctgtgtcccaaa	240	
OY	241 AGGTTCACTGGCAGAGTCTGGGTCAGATTATTCCTGCACCAACACACAGCTTGAAGTCT	300	
Db	241 aggttcactggcagagtctgggtcagattatctctgcacacacagcagccttgaagctc	300	
OY	301 GAAGATTTTGTAGCCCTATTACTGTCTCAAAATATGCTAGTTCCTCGGTACAGATTGGAAGG	360	
Db	301 gaagattttgtagccctattactgtctcaaaatattgctagttctcgtacacagttcgtgaagg	360	
OY	361 GGGGACCAAGCTGGAAATTAACGGGGCTGATGCTGCACCACTGTATCAATCTTCCGCCCA	420	
Db	361 ggggaccaagctggaaatttaacggggctgatgctgcacacctgtatcaatcttccgccca	420	
OY	421 TCCAGTTAAGCTTGGG	435	
Db	421 tcagttaagcttggg	435	
RESULT	2		
AAV83772			
ID	AAV83772 standard; cDNA; 435 BP.		
XX	AAV83772;		
AC			
XX	16-MAR-1999 (first entry)		
DT			
XX	Antibody 11D10 light chain variable region coding sequence.		

XX	murine; mouse;
XX	antibody; light chain; variable region; anti-idiotypic; ss
KM	human milk fat globule; tumour; ovary; lung; pancreas; carcinoma; breast
XX	
OS	Mus sp.
XX	
FH	Location/Qualifiers
FT	1..435
FT	1..*tag=
FT	product="antibody 11D10 light chain variable region"
FT	/transl_except= (pos:163..165, aa:Thr)
FT	/note="no stop codon is given at the 3' end of the
FT	sequence"
FT	1..60
FT	/*tag=
FT	b
FT	61..435
FT	mat_peptide
FT	/*tag=
FT	c
XX	
PN	W09856419-A1.
XX	
XX	17-DEC-1998.
PD	
PP	12-JUN-1998;
XX	98WO-US12250.
XX	
XX	11-JUN-1998;
XX	98US-0096244.
PR	13-JUN-1997;
PR	97US-0049540.

PA (KENT) UNIV KENTUCKY RES FOUND.
 XX
 PI Chatterjee M, Foon KA;
 XX
 DR WPI; 1999-060028/05.
 DR P-PSDB; AAM87593.
 DR
 XX
 PT Delaying development of, or treating, HMFg-associated tumours -
 PT using anti-idiotypic antibody 1D10 raised against antibodies to
 PT human milk fat globule protein
 XX
 XX Disclosure; Fig 1; 54pp; English.

CC This sentence represents the coding sequence for the murine antibody
CC 1D10 light chain variable region. This anti-idiotypic antibody is used
CC to delay the development of, or treat, a human milk fat globule (HMFG)
CC associated tumour in an individual having low tumour burden.
CC The antibody 1D10 is used to prevent the recurrence of HMFG-associated
CC tumours e.g. ovarian, non-small cell lung and pancreatic carcinoma,
CC especially for treating breast tumours.

SQ Sequence 435 BP; 100 A; 111 C; 102 G; 122 T; 0 other;

Query Match	100.0%	Score 435; DB 20	Length 435;
Best Local Similarity	100.0%	Pred. No. 3.3e-210;	
Matches 435; Conservative	0;	Mismatches 0;	Indels 0; Gaps 0;

QY	1	ATGGGGGGCCCTGCTCGATGAAATCTTGGGGTTCCTTGTGGCTTTGTTTCCAGGTACCAAGTATG	60
Db	1	atggggggccctgtctcagatcttcagatctcttggtctctgtgtccagtgtaccagatgt	60
QY	61	GACATCCAGATGACCCAGCTCCATCTCTTATCTCTCCCTCTCTGGAGACAAAGTACAT	120
Db	61	gacatccagatgaccacagctccatctctctcctctacctctgctccctcggagacaagatga	120
QY	121	CTCACTGTCTCGGCACTCAGAGCAATTTGGATTAACTTACATTGAGCTTTCAGCAGGAACA	180
Db	121	ctcactgtctcggcagcaactcagagcaatttggattaaacttaccttaccatctgctctcagcaga	180
QY	181	GATGGAAGTATTAAAGCCCTGATCTAGGCCACATCCAGTTAGTCTCTGGTGTGCCCAAA	240
Db	181	gatggaagtaataaagccctgatactcagccacatccagtttagtctctgtgtgtcccaaa	240
QY	241	AGGTTCAAGTGCACATAGTCTGGGCTCAGATTATCTTCACCAATCAGACACCTTGAAGTC	300
Db	241	aggttcagtgacatagctctgggctcagattatcttcaccaatcagacaccttgaagtc	300

Db 241 aggttcagtcgacagtcgtggtcagattatctctcacacagcagccttgagctc 300
OY 301 GAAGATTGTTGGTACTGCTCTACATATGCTAGTCTCCGTACAGTTCGGAGGG 360
Db 301 gaaatcttcgtacgtactctactctcaataatgtagtctccgtacacgctcgaggg 360
OY 361 GGGACCAAGCTGGAATAAAGGGGCTGATGCTGCACCACTGATCCATCTTCCACCA 420
Db 361 ggagccaaagctggaataaagcggtcgtatgctgcaccactgtatcattctccacca 420
OY 421 TCACGTAAGCTTGGG 435
Db 421 tcacgtaagcttg9 435

RESULT 3
AAT77851
ID AAT77851 standard; cDNA; 387 BP.
XX
AC AAT77851:
XX
DT 03-NOV-1997 (first entry)
XX
DE Murine anti-human class II monoclonal antibody 44H104 VL chain cDNA.
XX
KM Antibody: light chain; variable region; hybridoma cell line 44H104;
KM immune response; enhance; stimulate; vaccine; immunodiagnosis;
KM antigen delivery; ss.
XX
OS Mus musculus.
XX
FH Key Location/Qualifiers
FT CDS 1..387
FT /tag= a
FT /note= "Encodes 44H104 light chain variable region,
including secretion signal; termination
codon not given"

PN MO9640941-A1.
XX
PD 19-DEC-1996.
XX
PF 07-JUN-1996; 96MO-CA00400.
XX
PR 07-JUN-1995; 95US-0483576.
XX
PA (CONN-) CONNAUGHT LAB LTD.
XX
PI Anand NN, Barber BH, Caterini JE, Cates GC, Klein MH;
XX
DR WPI: 1997-077271/07.
XX
DR P-PSDB: AAW23537.
XX
PT Recombinant conjugate antibody mol., modified for delivering an
PT antigen - elicits enhanced immune response without the use of
PT adjuvant to generate antibodies which are useful in vaccines or
PT immuno:diagnosis
XX
PS Example 1: Fig 1A; 64pp; English.
XX
CC Novel recombinant conjugate antibody molecules comprise a monoclonal
CC antibody specific for a surface structure of antigen presenting
CC cells (APC), genetically modified to contain at least one antigen
CC exclusively at one or more preselected sites. The conjugate is capable
CC of delivering the antigen to APC and eliciting an immune response to
CC the antigen. The new conjugates are useful as vaccines and are able
CC to elicit an enhanced immune response without the use of an adjuvant.
CC In a specific example, a conjugate was constructed using the murine
CC anti-human class II monoclonal antibody secreted by hybridoma
CC 44H104. The peptide C1TB36 was chosen as antigen; it consists of
CC a tandemly linked T and B cell epitope derived from HIV MN strain.
CC The present sequence encodes the light chain variable region which
CC was PCR amplified from 44H104 and used in the preparation of a

CC conjugate with antigen C1TB36.
XX
SQ Sequence 387 BP; 90 A; 95 C; 90 G; 112 T; 0 other;
XX

Query Match 23.4%; Score 102; DB 18; Length 387;
Best Local Similarity 100.0%; Pred. No. 6.6e-42;
Matches 102; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 42 GTTTCAGGTACAGATGTGACATGCATGACATGACCCAGTCTTCATCTTATCTGCTC 101
Db 48 gtctccagtgaccagatgacatccagatgacccagctccatcccttattctgcctc 107
OY 102 TCTGGACAAAGAGCTCACTGCTCACTGTCGGGCAAGTCAGGA 143
Db 108 tctggacaaagagtcagtcactgtctcg9caagtcagga 149

RESULT 4
AAX00879
ID AAX00879 standard; DNA; 276 BP.
XX
AC AAX00879;
XX
DT 29-MAR-1999 (first entry)
XX
DE Mouse derived RT3 phage antibody light chain pattern C genetic sequence.
XX
KM Catalytic: antibody; phage display; immunising; phage expression vector;
KM prodnug: scfv; ss.
XX
OS Mus sp.
XX
FH Key Location/Qualifiers
FT CDS 1..276
FT /tag= a
FT /note= "the start and stop codons are not indicated"

PN US5855885-A.
XX
PD 05-JAN-1999.
XX
PF 14-JUL-1994; 94US-0273146.
XX
PR 22-JAN-1993; 93US-0007684.
XX
PR 14-JUL-1994; 94US-0273146.
XX
PA (CHIS/) CHISWELL D.
PA (DARS/) DARSLEY M J.
PA (FITZ/) FITZGERALD K.
PA (KENT/) KENTEN J H.
PA (MART/) MARTIN M T.
PA (MCCA/) MCCAFFERTY J.
PA (SMIT/) SMITH R.
PA (TITM/) TITMAS R C.
PA (WILL/) WILLIAMS R O.
XX
PI Chiswell D, Darsley MJ, Fitzgerald K, Kenten JH;
PI Martin MT, McCafferty J, Smith R, Titmas RC, Williams RO;
XX
DR WPI: 1999-105036/09.
XX
DR P-PSDB: AAW95480.
XX
PT Production of catalytic antibodies displayed on bacteriophages -
PT comprises generating a gene library of antibody-derived domains
PT inserting coding into a phage expression vector and isolating the
PT catalytic antibodies
XX
PS Example 4: Fig 11; 117pp; English.
XX
XX The invention relates to methods for producing catalytic antibodies
CC displayed on a phage. The method comprises: (a) generating a gene library
CC of antibody-derived domains; (b) inserting coding for the domains into a

CC phage expression vector; and (c) isolating the catalytic antibodies. The
 CC phage expression vector incorporates a histidine peptide in tandem with a
 CC myc peptide. The catalytic antibodies can be isolated by preparing an
 CC antigen; optionally immunising an animal with the antigen; generating a
 CC library of VH and VL domains from the immunised animal; cloning the VH
 CC and VL domains into a phage expression vector to generate phage display
 CC antibodies; selecting phage display antibodies which bind specifically
 CC to the antigen; screening the selected phage display antibodies for
 CC catalytic activity to substrate; and isolating the catalytic antibodies,
 CC where the phage expression vector incorporates a histidine peptide in
 CC tandem with a myc peptide. The processes are used to produce catalytic
 CC antibodies, which can be used for in vivo activation of a prodrg. The
 CC present sequence represents a genetic sequence of light chain PCR
 CC pattern C from mouse derived RT3 phage antibodies.

CC Sequence 276 BP; 67 A; 65 C; 64 G; 80 T; 0 other;

CC Query Match 23.0%; Score 100; DB 20; Length 276;

CC Best Local Similarity 99.3%; Pred. No. 6.9e-41;

CC Matches 150; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

CC Oy 163 TGACCTCAGACGAGCAGATGAGTAAAGCGCTGATCTAGCGCACATCCAGTTTA 222

CC Db 79 tggcttcagcaggaaccagatggaactataaagcctatcagccacatccagttta 138

CC Oy 223 GGTTCGTGTCGCCCAAAAGTTTCAGTGCAGTAGCTGGGTACAGATTATTCCTCACC 282

CC -Db 139 gattctcgtgtccccaagaagttcagtgagtgctcgtgcagattatctctcacc 198

CC Oy 283 ATCAGCAGCCTTGAGTCTGAGATTTTGTAG 313

CC Db 199 atcagcagccttgagtcgaaagatttctgag 229

CC RESULT 5

CC AAX00875

CC ID AAX00875 standard; DNA; 276 BP.

CC AC AAX00875;

CC DT 29-MAR-1999 (first entry)

CC DE Mouse derived RT3 phage antibody light chain pattern A genetic sequence.

CC KM Catalytic; antibody; phage display; immunising; phage expression vector;

CC KW prodrg; scFv; ss.

CC OS Mus sp.

CC XX

CC FH Key Location/Qualifiers

CC FT CDS 1..276

CC FT /*tag= a

CC FT /note= "the start and stop codons are not indicated"

CC XX

CC PN US5855885-A.

CC PD 05-JAN-1999.

CC PF 14-JUL-1994; 94US-0273146.

CC PR 22-JAN-1993; 93US-0007684.

CC PR 14-JUL-1994; 94US-0273146.

CC PA (CHS/) CHISWELL, D.

CC PA (DARS/) DARSLEY, M. J.

CC PA (FITZ/) FITZGERALD, K.

CC PA (KENT/) KENTEN, J. H.

CC PA (MART/) MARTIN, M. T.

CC PA (MCCA/) MCCAFFERTY, J.

CC PA (SMIT/) SMITH, R.

CC PA (TITM/) TITMAS, R. C.

CC PA (WILL/) WILLIAMS, R. O.

XX Chiswell D, Darsley MJ, Fitzgerald K, Kenten JH;
 PI Martin MT, McCafferty J, Smith R, Titmas RC, Williams RO;
 DR WPI: 1999-105036/09.

XX P-PSDB: AAW95476.

XX Production of catalytic antibodies displayed on bacteriophages -

XX PT inserting coding into a phage expression vector and isolating the

XX catalytic antibodies

XX Example 4; Fig 9A-F; 117pp; English.

XX PS

XX The invention relates to methods for producing catalytic antibodies

XX CC displayed on a phage. The method comprises: (a) generating a gene library

XX CC of antibody-derived domains; (b) inserting coding for the domains into a

XX CC phage expression vector; and (c) isolating the catalytic antibodies. The

XX CC phage expression vector incorporates a histidine peptide in tandem with a

XX CC myc peptide. The catalytic antibodies can be isolated by preparing an

XX CC antigen; optionally immunising an animal with the antigen; generating a

XX CC library of VH and VL domains from the immunised animal; cloning the VH

XX CC and VL domains into a phage expression vector to generate phage display

XX CC antibodies; selecting phage display antibodies which bind specifically

XX CC to the antigen; screening the selected phage display antibodies for

XX CC catalytic activity to substrate; and isolating the catalytic antibodies,

XX CC where the phage expression vector incorporates a histidine peptide in

XX CC tandem with a myc peptide. The processes are used to produce catalytic

XX CC antibodies, which can be used for in vivo activation of a prodrg. The

XX CC present sequence represents a genetic sequence of light chain pattern A

XX CC from mouse derived RT3 phage antibodies.

XX SQ Sequence 276 BP; 68 A; 65 C; 63 G; 80 T; 0 other;

XX Query Match 23.0%; Score 100; DB 20; Length 276;

XX Best Local Similarity 99.3%; Pred. No. 6.9e-41;

XX Matches 150; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

XX Oy 163 TGACCTCAGACGAGCAGATGAGTAAAGCGCTGATCTAGCGCACATCCAGTTTA 222

XX Db 79 tggcttcagcaggaaccagatggaactataaagcctatcagccacatccagttta 138

XX Oy 223 GGTTCGTGTCGCCCAAAAGTTTCAGTGCAGTAGCTGGGTACAGATTATTCCTCACC 282

XX -Db 139 gattctcgtgtccccaagaagttcagtgagtgctcgtgcagattatctctcacc 198

XX Oy 283 ATCAGCAGCCTTGAGTCTGAGATTTTGTAG 313

XX Db 199 atcagcagccttgagtcgaaagatttctgag 229

XX RESULT 6

XX AAN30165

XX ID AAN30165 standard; DNA; 450 BP.

XX AC AAN30165;

XX DT 25-MAY-1992 (first entry)

XX DE Sequence encoding the leader, variable region and first 16 AAs of

XX DE the constant region of the kappa-chain (light chain) of MOPC1.

XX KM Diagnosis; therapy; immunoglobulin; ss.

XX OS Homo sapiens.

XX XX

XX FH Key Location/Qualifiers

XX FT CDS 13..78

XX FT /*tag= a

XX FT /product= leader

XX FT CDS 79..402

XX FT /*tag= b

```

FT      /product= variable region
FT      403..450
FT      /*tag= C
FT      /product= constant region
XX      EP88994-A.
XX      21-SEP-1983.
XX      10-MAR-1983; 83EP-0001655.
XX      15-MAR-1982; 82US-0358414.
XX      05-DEC-1983; 83US-0558551.
XX      (SCHE ) SCHERING CORP.
XX      (DNAX-) DNAX RES INST.
XX      Moore KW, Zaffaroni A;
XX      WPI: 1983-772290/39.
XX      P-PSDB; AAP30251.
XX      Transformed expression vectors or plasmid(s) - with double
XX      stranded DNA sequence coding only for desired part of polypeptide
XX      chain
XX      Example; Page 40-41; 68pp; English.
XX      The pref. vector or plasmid of the invention has a double-stranded
XX      DNA seq. coding for a variable region of a light or heavy chain of
XX      IgG, or for a variable region of a light or heavy chain of an
XX      immunoglobulin specific for an enzyme or surface protein. The
XX      sequence esp. codes for a variable region of a light chain having 95-
XX      115 AAs or for a variable region of a heavy chain having 110-125 AAs
XX      esp. including the D region of the heavy chain.
XX      Sequence 450 BP; 108 A; 114 C; 104 G; 124 T; 0 other;
XX
Query Match      23.0%; Score 100; DB 4; Length 450;
Best Local Similarity 99.3%; Pred. No. 6.8e-41;
Matches 150; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
XX
QY      163 TGGCTTCAGCAGAAACAGATGAACTATTAACGCCGTGATCGGCACATCCAGTTTA 222
XX      |||||||
XX      181 tggcttcagcaggaacagatgaaactatataacgctgactacgcacacccagttta 240
XX      |||||||
QY      223 GGTTCGTGTGTCCCAAAAGGTTTCAGTGGCAGTAGTCTGGGTGAGATTATCTCTCACC 282
XX      |||||||
XX      241 gattctgtgtgtcccaaaaggttcagtcgtagtctgtgtcattatctctcacc 300
XX      |||||||
QY      283 ATCAGCAGCCCTGAGTGTGAAGATTGTTGATG 313
XX      |||||||
XX      301 atcagcagccctgagtcgtgaagattttag 331
XX
RESULT      7
AAV20086
ID      AAV20086 standard; DNA: 535 BP.
XX
AC      AAV20086;
XX
DT      14-JUL-1998 (first entry)
XX
DE      Consensus DNA sequence of the murine variable light chain region.
XX
XX      Mouse; Act-1 antibody; human alpha4-beta7 integrin;
XX      muscosal adressin cell adhesion molecule-1; MadCAM-1;
XX      humanised antibody; murine antigen binding region; inhibition;
XX      leukocyte infiltration of tissue; treatment; inflammatory disease;
XX      inflammatory bowel disease; ss.
XX
Mus sp.
XX

```

```

XX      Key      Location/Qualifiers
XX      CDS      16..435
XX      FT      /*tag= a
XX      FT      /note= "no stop codon given"
XX      FT      sig_peptide      16..75
XX      FT      /*tag= b
XX      FT      mat_peptide      76..435
XX      FT      /*tag= c
XX      PN      WO9806248-A2.
XX      XX      19-FEB-1998.
XX      PD      19-FEB-1998.
XX      XX      06-AUG-1997; 97WO-US13884.
XX      PE      15-AUG-1996; 96US-0700737.
XX      PR      (LEUK-) LEUKOSITE INC.
XX      PA      Bendig MM, Jones ST, Newman W, Ponath PD, Ringler DJ;
XX      PI      Saldanha J;
XX      PI      WPI: 1998-159172/14.
XX      DR      P-PSDB; AAW53817.
XX      XX
XX      Humanised immunoglobulin reactive with alpha-4-beta-7 integrin -
XX      used for treating inflammatory disease, pancreatitis, diabetes,
XX      asthma, graft versus host disease and sarcoidosis
XX      Example 1; Fig 3; 145pp; English.
XX
XX      The present sequence represents the consensus nucleotide sequence
XX      comprising the variable region of murine Act-1 antibody determined from
XX      several independent mouse light chain variable region clones. Act-1 is
XX      active against human alpha4-beta7 integrin. Muscosal adressin cell
XX      adhesion molecule-1 (MadCAM-1) is a ligand of this particular integrin.
XX      The Act-1 antibody interferes with alpha4-beta7 integrin binding to
XX      MadCAM-1, which is present of high endothelial venules in mucosal
XX      lymph nodes. Variable regions were amplified from DNA encoding Act-1
XX      using degenerate PCR primers AAV20083-84. The degeneracy of the PCR
XX      CC primers produced several different sequences, of which the present
XX      CC sequence is a consensus sequence. The present sequence was used to
XX      CC construct chimeric, humanised Act-1 antibodies, which contain murine
XX      CC antigen binding regions. The humanised immunoglobulin can be used to
XX      CC inhibit the interaction of cells bearing alpha4-beta7 with cells bearing
XX      CC a ligand for alpha4-beta7. It can be used for inhibiting leukocyte
XX      CC infiltration of tissues, e.g. for treating inflammatory diseases such
XX      CC as inflammatory bowel disease. The immunoglobulin can also be used for
XX      CC detection, isolation and diagnosis.
XX
SQ      Sequence 535 BP; 126 A; 128 C; 132 G; 149 T; 0 other;
XX
Query Match      21.4%; Score 93; DB 19; Length 535;
Best Local Similarity 100.0%; Pred. No. 2.3e-37;
Matches 93; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
QY      343 CCGTACAGTTCGGAGGGGGGACCAAGCTGGAATTAACGGCTGATGTCACCAACT 402
XX      |||||||
XX      373 ccgtacagtttcggaggggggacccaagctggaataaacygtgtgtgcacccaact 432
XX      |||||||
QY      403 GTATCATCTTCCACCATCCAGTAAGCTTGGG 435
XX      |||||||
XX      435 gtatcatcttccaccatccagtaagcttggg 465
XX      |||||||
XX
RESULT      8
AAO90431
ID      AAO90431 standard; DNA: 438 BP.
XX
AC      AAO90431;
XX

```

```
DT 02-FEB-1996 (first entry)
XX
DE DNA encoding anti-idiotypic antibody Id1017 clone 17KBL.
XX
XX Antibody: cancer: CDR: heavy chain; light chain; immunoglobulin;
KW complementarity determining region, ds.
XX
OS Mus sp.
XX
XX Location/Qualifiers
FH Key 1..438
FT CDS /*tag= a
FT sig_peptide /product= anti-idiotypic-antibody_Id1017
FT 1..39
FT /*tag= b
XX
XX JP07101999-A.
XX
XX 18-APR-1995.
XX
XX 06-OCT-1993; 93JP-0272950.
XX
XX 06-OCT-1993; 93JP-0272950.
XX
XX 06-OCT-1993; 93JP-0272950.
XX
XX (HAGI/) HAGIMAWA Y.
XX
XX WPI: 1995-182987/24.
XX
XX P-PSDB; AAR74966.
XX
XX Novel anti-idiotypic antibody against an human anticancer monoclonal
PT antibody - and DNA sequences encoding the antibody, useful in
PT pharmacology, medicine and biochemical fields.
XX
XX Example 5; Page 19; 28pp; Japanese.
XX
XX AAQ90425-Q90434 are DNA molecules encoding anti-idiotypic antibodies
CC Id103, Id107, Id102, Id107 and Id103 against a human anticancer
CC monoclonal antibody. These antibodies and DNA encoding them are useful
CC in pharmacological, medical and biochemical fields of research.
XX
XX Sequence 438 BP; 104 A; 120 C; 112 G; 102 T; 0 other;
SQ

Query Match 20.7%; Score 90; DB 16; Length 438;
Best Local Similarity 100.0%; Pred. No. 7.7e-36;
Matches 90; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 346 TACACGTTGGAGGGGGGACCAAGCTGGAATATAACGGGCTGATGTCACCACTGA 405
DB ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
DB 334 tacacgttcgaggggggacccaagctggaataaacaagcgctgctgcaccaactgta 393
QY TCCATCTCCACCATCCAGTAAGCTTGGG 435
DB ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
DB 394 tccatctccaccatccagtaagcttggg 423

RESULT 9
AAT85091
ID AAT85091 standard; cDNA: 642 BP.
XX
XX AAT85091;
XX
XX 18-NOV-1997 (first entry)
XX
DE Mouse monoclonal antibody B9 light chain encoding cDNA.
XX
XX Human plasma apolipoprotein B-100; arteriosclerotic lipoprotein;
KW antibody; Fab; ds.
XX
XX Mus musculus.
XX
XX Key Location/Qualifiers
FH CDS 1..642
```

```
FT /*tag= a
FT /product= B9L
FT /note= "Stop codon not shown"
FT misc_feature 322..642
FT /*tag= b
FT /label= Ckappa
XX
XX JP09154587-A.
XX
XX 17-JUN-1997.
XX
XX 09-MAY-1996; 96JP-0114492.
XX
XX 02-NOV-1995; 95KR-0039459.
XX
XX (KOAD ) KOREAN SCI & TECHNOLOGY RES CENT.
XX
XX WPI: 1997-367067/34.
XX
XX P-PSDB; AAW27089.
XX
XX DNA encoding mouse antibody binding human plasma apo-lipoprotein
PT B-100 - useful for removing arteriosclerotic lipoprotein(s)
XX
XX Claim 4; Fig 6; 17pp; Japanese.
XX
XX The present sequence encodes the mouse monoclonal antibody B9 light
CC chain (B9L), which binds specifically to human blood apolipoprotein
CC B-100. The nucleic acid can be used in a method for the preparation
CC of a reconstituted antibody which specifically binds human plasma
CC apolipoprotein B-100. The antibody can be used as a reagent for
CC determining the concentration of human plasma apolipoprotein B-100
CC in a sample. The antibody is also useful in a drug composition for
CC selectively removing arteriosclerotic lipoproteins containing human
CC plasma apolipoprotein B-100.
XX
XX Sequence 642 BP; 188 A; 152 C; 152 G; 150 T; 0 other;
SQ

Query Match 19.5%; Score 85; DB 18; Length 642;
Best Local Similarity 100.0%; Pred. No. 2.6e-33;
Matches 85; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 342 TCCGATACGTTGAGGGGGGACCAAGCTGGAATATAACGGGCTGATGTCACCAAC 401
DB ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
DB 282 tccgatacgttcgggggggacccaagctggaataaacaagcgctgctgcaccaac 341
QY 402 TGTATCCATCTCCACCATCCAGT 426
DB ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
DB 342 tgtatccatctccaccatccagt 366

RESULT 10
AAA44346
ID AAA44346 standard; cDNA: 651 BP.
XX
XX AAA44346;
XX
XX 21-NOV-2000 (first entry)
XX
DE Human secreted expressed sequence tag SEQ ID NO:921.
XX
XX Human; mouse; chicken; rat; secreted expressed sequence tag; SEST;
KW expressed sequence tag; EST; probe; chemotactic; proliferative;
KW immunomodulatory; haematopoietic; chemokine; analgesic; haemostatic;
KW thrombolytic; antiinflammatory; cytosolic; antibacterial; antifungal;
KW antiviral; antidiabetic; antilastmatic; vulnery; antiparkinsonian;
KW antitumor; osteoprotective; neuroprotective; nootropic; antipsoriatic;
KW cerebroprotective; anticonvulsant; antidepressant; gene therapy;
KW vaccine; autoimmune disorder; multiple sclerosis; allergic condition;
KW insulin dependent diabetes; asthma; myeloid cell deficiency; ulcer;
KW lymphoid cell deficiency; burn; osteoporosis; osteoarthritis;
KW central nervous system disorder; Alzheimer's disease; stroke;
KW Parkinson's disease; Huntington's disease; coagulation disorder;
```


KW haemophilia; thrombosis; inflammatory disorder; Crohn's disease;
KM tumour; infection; depression; psoriasis; ss.
XX
OS Homo sapiens.
XX WO200021991-A1.
XX
XX
PD 20-APR-2000.
XX
PF 15-OCT-1999; 99WO-US24206.
XX
XX 15-OCT-1998; 98US-0104436.
XX
XX (GEMX) GENETICS INST INC.
XX
PI Jacobs K, McCoy JM, LaVallie ER, Collins-Racie LA, Evans C;
PI Werberg D, Treacy M, Bowman MK;
XX WPI; 2000-317938/27.
XX
XX
XX Isolated polynucleotides, and encoded proteins, comprising secreted
PT expressed sequence tags (SESTs), useful for treating various disorders
PT such as autoimmune, infectious, and central nervous system disorders -
XX
XX
XX Claim 1: Page 440; 803pp; English.
XX
XX AAA4326 to AAA45925 represent specifically claimed secreted expressed
CC sequence tags (SESTs), isolated from human, mouse, chicken and rat
CC tissue sources. The SESTs can have a range of activities depending on
CC the tissues they were isolated from. The activities include:
CC chemotactic; proliferative; immunomodulatory; haematopoietic;
CC chemokinetic; analgesic; haemostatic; thrombolytic; antiinflammatory;
CC cytostatic; antibacterial; antifungal; antiviral; antidiabetic;
CC antitumour; antiparkinsonian; antipsoriatic; cerebroprotective;
CC neurotrophic; antiparkinsonian; antipsoriatic; cerebroprotective;
CC anticonvulsant; and antidepressant. The SESTs can be used for gene
CC therapy and in vaccines. The SESTs are useful as probes for the
CC identification and isolation of full-length cDNAs and genomic DNA
CC molecules which correspond to the SESTs. Proteins encoded by the SESTs
CC are useful in assays for determining biological activity and raising
CC antibodies. They may be useful for treatment of autoimmune disorders
CC (multiple sclerosis, insulin dependent diabetes), allergic conditions
CC (asthma), myeloid or lymphoid cell deficiencies, wounds, burns, ulcers,
CC osteoporosis, osteoarthritis, central nervous system disorders
CC (Alzheimer's, Parkinson's, Huntington's disease, stroke), coagulation
CC disorders (haemophilia, thrombosis), inflammatory disorders (Crohn's
CC disease), tumours, bacterial, fungal or viral infections, depression and
CC psoriasis. AAA45926 to AAA45931 represent linker variants which are given
CC in the exemplification of the present invention.
XX
XX
SO Sequence 651 BP; 174 A; 166 C; 151 G; 160 T; 0 other;

Query Match 19.5%; Score 85; DB 21; Length 651;
Best Local Similarity 100.0%; Pred. No. 2.6e-33;
Matches 85; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 342 TCCGTCACGCTTGGAGGGGGGACCAAGCTGGAATATAAAGCGGCTGATCTGCACCAAC 401
DB 375 tccgtacacgttcggagggggaccaaagctggaataaagcggtgatctgcaccaac 434
QY 402 TGTATCCATCTTCCCAACATCCAGT 426
DB 435 tgtatccatcttcccaacatccagt 459

RESULT 11
AA87818
ID AA87818 standard; DNA; 652 BP.
XX
AC AA87818;
XX
XX 09-DEC-1997 (first entry)
DT

XX
XX Antibody 362 light chain variable region coding sequence.
DE
XX
XX catalytic antibody; enantioselective hydrolysis; hydridoma;
KW ZAA7G12; ZAA3G2; ds.
XX
XX
OS Mus.
XX
XX
XX key Location/Qualifiers
FT 1..651
FT CDS /tag= a
FT /product= antibody 7G12 light chain variable region
FT /note= "an earlier nonsense codon TAA exists at
FT positions 643-645"

XX
XX WO9629426-A1.
XX
XX
XX 26-SEP-1996.
XX
XX
XX 17-MAR-1995; 95WO-JP00462.
XX
XX 17-MAR-1995; 95WO-JP00462.
XX
XX (PROT-) PROTEIN ENG RES INST.
XX
XX
XX Fujii I, Kinoshita K, Tanaka F;
XX
XX WPI; 1996-443189/44.
XX
XX P-PSDB; AAM15935.
XX
XX
XX Catalytic antibody for enantioselective hydrolysis of amino acid
PT esters - also new hydridoma secreting the antibody
XX
XX
XX disclosure; Page 37-38; 49pp; Japanese.
XX
XX The patent discloses new catalytic antibodies which hydrolyse amino
CC acid esters enantioselectively. Preferably the esters are 4-nitro-
CC benzyl esters and the esterified amino acids are amino-protected.
CC Also disclosed are new hydridomas expressing the catalytic antibodies,
CC especially ZAA/G12 (FERM BP-4947) and ZAA3G2 (FERM BP-4946). The
CC antibodies are raised in mice using the compound p-nitrobenzyl
CC (4-carboxy-1-(benzylloxycarbonylamino)-butyl]phosphonate as hapten.
CC They are used for efficient resolution of racemic amino acids with
CC high optical selectivity, giving optically active amino acids useful
CC for the production of optically active drugs and chiral separation
CC agents.
CC The present sequence represents the coding sequence for the
CC variable region of the light chain of antibody 3G2, produced by
CC the hydridoma ZAA3G2.
XX
XX
SO Sequence 652 BP; 194 A; 151 C; 154 G; 153 T; 0 other;

Query Match 19.5%; Score 85; DB 17; Length 652;
Best Local Similarity 100.0%; Pred. No. 2.6e-33;
Matches 85; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 342 TCCGTCACGCTTGGAGGGGGGACCAAGCTGGAATATAAAGCGGCTGATCTGCACCAAC 401
DB 282 tccgtacacgttcggagggggaccaaagctggaataaagcggtgatctgcaccaac 341
QY 402 TGTATCCATCTTCCCAACATCCAGT 426
DB 342 tgtatccatcttcccaacatccagt 366

RESULT 12
AAA27849
ID AAA27849 standard; DNA; 678 BP.
XX
AC AAA27849;
XX
XX 12-SEP-2000 (first entry)
DT

```

XX XX      MOM-1 Fab light chain DNA.
DE XX
XX XX
KW KW      MOM-1; Fab: single chain antibody; PAC-1; monoclonal antibody;
KW mouse; integrin; vitronectin receptor alpha-v beta-3;
KW drug delivery; gene therapy; ligand mimetic; ss.
XX XX
OS OS      Mus musculus.
XX XX
XX XX      Location/Qualifiers
FT FT      22..678
FT CDS      /*tag= a
FT          /partial
XX XX      WO200034780-A2.
XX XX      15-JUN-2000.
XX XX
XX XX      03-DEC-1999; 99WO-EP09460.
XX XX
XX XX      04-DEC-1998; 98US-0110950.
XX XX      23-JUL-1999; 99US-0145458.
XX XX
XX XX      (NOVS ) NOVARTIS AG.
XX XX      (NOVS ) NOVARTIS-ERINDUNGEN VERW GES MBH.
XX XX      (SCRI ) SCRIPPS RES INST.
XX XX
XX XX      Shattil SJ, Nemerow GR, Hato T, Stupack DG, Pampori NA;
XX XX      WPI: 2000-442184/38.
XX XX      P-PSDB; AAY95258.
XX XX
XX XX      Novel monoclonal antibody that selectively binds activated vitronectin
XX XX      receptor useful for detecting the presence of activated vitronectin
XX XX      receptor in tissue and for delivering therapeutic composition to the
XX XX      tissue
XX XX
XX XX      Example 1; Page 15; 42pp; English.
XX XX
XX XX      The present sequence is that of DNA coding for the light chain (see
XX XX      (AAY95258) of MOM-1 Fab, a novel monovalent ligand-mimetic that
XX XX      selectively binds to activated vitronectin receptor alpha-v beta-3.
XX XX      MOM-1 Fab was created by replacing the 19 amino acid heavy chain
XX XX      complementarily determining region 3 (CDR3) of PAC1 Fab with the 50
XX XX      amino acid alpha-v integrin-binding domain from adenovirus type 2
XX XX      penton base protein by splice-overlap PCR (see AAR27850-53). The
XX XX      modified PAC1 Fab (designated MOM-1) has been expressed as a
XX XX      His-tagged fusion protein in a Drosophila expression system. MOM-1
XX XX      is used in a claimed method for detecting the presence of activated
XX XX      vitronectin receptor alpha-v beta-3 in a tissue, and in a claimed
XX XX      method for delivery of an agent in a therapeutic composition to such
XX XX      a tissue ex vivo or in vivo, the tissue being selected from
XX XX      neovascular cells, smooth muscle endothelial cells, arterial cells,
XX XX      osteoclasts and tumour cells. The agent in the therapeutic
XX XX      composition is preferably a biologically active compound, especially
XX XX      a gene, antisense nucleic acid or catalytic nucleic acid (claimed).
XX XX      Also claimed are nucleic acid expression vectors comprising an
XX XX      expression cassette encoding a fusion protein comprising an
XX XX      activated alpha-v beta-3 specific ligand, such as the CDR3 domain
XX XX      or the activated alpha-v beta-3 binding domain of Fab MOM-1,
XX XX      operatively linked to a biologically active agent.
XX XX
XX XX      Sequence 678 BP; 194 A; 171 C; 156 G; 157 T; 0 other;
XX XX
XX XX      Query Match 19.5%; Score 85; DB 21; Length 678;
XX XX      Best Local Similarity 100.0%; Pred. No. 2.6e-33;
XX XX      Matches 85; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY 402 TGTATCCATCTTCACCATCCAGT 426
Db 378 tgtatccatcttcacccatccag 402
XX XX
XX XX      RESULT 13
XX XX      ID AAQ92503
XX XX      AAQ92503 standard; cDNA; 723 BP.
XX XX
XX XX      AAQ92503;
XX XX
XX XX      07-FEB-1996 (first entry)
XX XX
XX XX      Mouse antibody F4-7 light chain variable region coding sequence.
XX XX
XX XX      Primer; amplification; PCR; mouse; kappa chain; heavy chain; Fab;
XX XX      antibody; immunotolerance; animal; variegated display library;
XX XX      variable region; antigen; immunorecessive; cell surface marker; foetal;
XX XX      cancer; stem cell; variant; therapy; Alzheimer's disease; hybridoma;
XX XX      familial hypercholesterolaemia; binding affinity; ds.
XX XX
XX XX      Mus musculus.
XX XX
XX XX      Location/Qualifiers
XX XX      Key 67..399
XX XX      CDS /*tag= a
XX XX      /product= antibody F4-7 light chain variable region
XX XX
XX XX      WO9515982-A2.
XX XX
XX XX      15-JUN-1995.
XX XX
XX XX      08-DEC-1994; 94WO-US14106.
XX XX
XX XX      06-DEC-1994; 94US-0350400.
XX XX      08-DEC-1993; 93US-0164022.
XX XX
XX XX      (GENZ ) GENZYME CORP.
XX XX
XX XX      Barsomian G, Copeland DP, Hillhouse D, Johnson T;
XX XX      WPI: 1995-224291/29.
XX XX      P-PSDB; AAR75459.
XX XX
XX XX      Generating new antibodies specific for immunorecessive epitopes
XX XX      by selection from variegated V gene library cloned from
XX XX      immuno:tolerance derived antibody repertoire, useful in diagnosis,
XX XX      purifcn. and therapy, e.g. of cancer
XX XX
XX XX      Disclosure; Page 80-81; 109pp; English.
XX XX
XX XX      The coding sequence of the light chain variable region from the mouse
XX XX      antibody F4-7. This sequence was isolated from a variegated display
XX XX      library (VDL) of variable regions derived from a repertoire of
XX XX      antibodies from an immunotolerised animal. The VDL is generated by PCR
XX XX      amplifying the variable regions from the antibody coding sequences using
XX XX      the primers AAQ74153-74. The variable regions, esp the complementarity
XX XX      determining regions (CDR; see AAR75462-93 for examples of CDRs) from the
XX XX      immunotolerant animals' antibodies are used to construct an antibody
XX XX      against a immunorecessive antigen e.g. a cell surface marker on a foetal,
XX XX      cancer or stem cell, which can differentiate between variant or related
XX XX      forms of the antigen. The antibodies generated can be used in the
XX XX      diagnosis, e.g. detection of the immunorecessive antigen, or in therapy
XX XX      e.g. of cancer, Alzheimer's disease or familial hypercholesterolaemia.
XX XX      The method of production of the antibody allows rapid and sensitive
XX XX      isolation of antibodies that would be difficult to isolate by standard
XX XX      methods. The antibodies produced have greater binding affinity than
XX XX      those produced by combinatorial/hybridoma methods.
XX XX
XX XX      Sequence 723 BP; 205 A; 195 C; 172 G; 151 T; 0 other;
XX XX
XX XX      Query Match 19.5%; Score 85; DB 16; Length 723;

```

Best Local Similarity 100.0%; Pred. No. 2.6e-33;
Matches 85; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 342 TCGGTACAGCTTGGAGGGGGGACCAAGCTGGAATTAACGGGCTGATCTGCACCAAC 401
|||||
Db 360 tccgtacagcttcggagggggacccaagctggaataaaccggctgctgcaccaac 419
QY 402 TGTATCCATCTTCCACCATCCAGT 426
|||||
Db 420 tgtatccatcttccaccatccagt 444

RESULT 14

AAZ61037
ID AAZ61037 standard; DNA; 738 BP.

XX AAZ61037;

XX 30-MAY-2000 (first entry)

XX Nucleotide sequence of light chain of anti-delta9-desaturase antibody.

XX Delta9-desaturase; antibody; transit peptide; passenger protein;

XX plant cell organelle; maize; stearyl-ACP-delta9-desaturase;

XX transgenic plant; light chain; ss.

XX Mus sp.

XX Key Location/Qualifiers
FH 37..693
FT /*tag= a
FT /product= "light chain"

XX W0200005391-A1.

XX 03-FEB-2000.

XX 21-JUL-1999; 99WO-US16405.

XX 21-JUL-1998; 98US-0093587.

XX (DOWC) DOW AGROSCIENCES LLC.

XX Sukhplinda K, Hasler JM, Petell JK, Strickland JA, Folkerts O;

XX WPI: 2000-182711/16.

XX P-PSDB; AAY68994.

XX Novel nucleic acid construct for down-regulating steady state levels of
PT proteins in plant cells, transgenic plants and their progeny -

XX Claim 21; Page 88-89; 114pp; English.

XX The present sequence encodes the light chain of a monoclonal antibody
CC which is directed against a Zea mays (maize) delta9-desaturase. The
CC present sequence is used to produce the constructs of the invention.
CC These constructs encode an antibody that can bind a transit peptide.
CC that directs an associated passenger protein to a plant cell organelle.
CC The transit peptide sequence of the maize stearyl-ACP-delta9-desaturase
CC (delta9-desaturase) was determined, and used to produce antibodies of
CC the invention. These antibodies were produced in transgenic plants of
CC the invention. The constructs of the invention are useful for producing
CC antibodies which decrease steady state levels of passenger proteins in
CC the organelles of plant cells and plants, by binding to the transit
CC peptide. This results in the production of transgenic plants which
CC have altered steady state passenger protein levels.

XX Sequence 738 BP; 203 A; 190 C; 169 G; 168 T; 8 other;

Query Match 19.5%; Score 85; DB 21; Length 738;
Best Local Similarity 100.0%; Pred. No. 2.6e-33;
Matches 85; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 342 TCGGTACAGCTTGGAGGGGGGACCAAGCTGGAATTAACGGGCTGATCTGCACCAAC 401
|||||
Db 333 tccgtacagcttcggagggggacccaagctggaataaaccggctgctgcaccaac 392
QY 402 TGTATCCATCTTCCACCATCCAGT 426
|||||
Db 393 tgtatccatcttccaccatccagt 417

RESULT 15

AAN91657
ID AAN91657 standard; DNA; 639 BP.

XX AAN91657;

XX 14-MAR-1990 (first entry)

XX Chimeric antibody light chain variable region.

XX Mus.

XX KSI/4; chimeric antibody; light chain variable region;

XX EP38767-A.

XX 25-APR-1989.

XX 18-APR-1989; 89EP-0303814.

XX 21-APR-1988; 88US-0184522.

XX (ELIL) ELI LILLY AND CO.

XX Beavers LS, Bumol TF, Gadske RA, Weigel BJ;

XX WPI: 1989-311203/43.

XX P-PSDB; AAP93035.

XX Recombinant DNA cpds. producing antibodies - monoclonal and
PT chimeric derived from monoclonal antibody KSI/4.

XX Claim 2; page 49; 89pp; English.

CC The DNA encodes the light chain of monoclonal antibody KSI/4, used to
CC construct mouse/human chimeric antibodies. KSI/4 is a murine antibody
CC which binds to surface antigens on adenocarcinoma cells and the use of
CC human C regions avoids immunological problems during treatment.

XX Sequence 639 BP; 174 A; 175 C; 149 G; 141 T; 0 other;

Query Match 19.3%; Score 84; DB 10; Length 639;

Best Local Similarity 100.0%; Pred. No. 8.2e-33;
Matches 84; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 343 CCGTACAGCTTGGAGGGGGGACCAAGCTGGAATTAACGGGCTGATCTGCACCAACT 402
|||||
Db 280 ccgtacagcttcggagggggacccaagctggaataaaccggctgctgcaccaact 339
QY 403 GTATCCATCTTCCACCATCCAGT 426
|||||
Db 340 gtaacatcttccaccatccagt 363

Search completed: February 21, 2002, 04:28:51
Job time: 28000 sec

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OM nucleic - nucleic search, using sw model

Run on: February 20, 2002, 20:39:26 ; Search time 2034.98 seconds

(without alignments)
2297.032 Million cell updates/sec

Title: US-08-836-455-1

Perfect score: 435

Sequence: 1 ATGGGGCCCCCTGCTCAGAT.....CACCATCCAGTAAGCTTGGG 435

Scoring table:

OLIGO_NUC
Gapop 60.0 , Gapext 60.0

Searched: 11351937 seqs, 5372889281 residues

Word size : 0

Total number of hits satisfying chosen parameters: 22703874

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Listing first 45 summaries

Database :

EST: *
1: em_estfun: *
2: em_esthm: *
3: em_estin: *
4: em_estom: *
5: em_estpl: *
6: em_estda: *
7: em_estro: *
8: em_estov: *
9: em_hic: *
10: qd_estl: *
11: qd_estc: *
12: qd_hic: *
13: qd_gss: *
14: em_gss_fun: *
15: em_gss_hum: *
16: em_gss_inv: *
17: em_gss_pln: *
18: em_gss_pro: *
19: em_gss_rtd: *
20: em_gss_vrt: *
21: em_gss_other: *

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	87	20.0	594	10	BE309592 601094848
2	85	19.5	725	11	BG963055 602828068
3	85	19.5	891	11	BE579422 602093833
4	85	19.5	906	11	BF785914 602112548
5	84	19.3	975	11	BG961850 602826515
6	83	19.1	750	11	BG965050 602829112
7	81	18.6	630	11	BF138788 601780387
8	81	18.6	707	11	BI250555 602993614
9	79	18.2	712	11	BI100311 602885776
10	79	18.2	778	11	BG964076 602828830
11	79	18.2	798	11	BG968518 602835104
12	75	17.2	944	11	BF687485 602102475

13	75	17.2	967	11	BF687410	BF687410 602102583
14	73	16.8	793	11	BG965736	BG965736 602830592
15	67	15.4	532	11	BI104783	BI104783 602891329
16	67	15.4	624	10	BE306691	BE306691 601104076
17	67	15.4	685	10	BE369854	BE369854 601221265
18	67	15.4	695	10	BE284224	BE284224 601099161
19	67	15.4	755	11	BI150509	BI150509 602915167
20	67	15.4	762	11	BF144806	BF144806 601791486
21	67	15.4	772	10	BE285427	BE285427 601096728
22	67	15.4	827	10	BI152061	BI152061 602916512
23	67	15.4	874	11	BG518527	BG518527 602578261
24	67	15.4	876	11	BI107286	BI107286 602894285
25	67	15.4	882	11	BF159226	BF159226 601766681
26	67	15.4	918	11	BF135931	BF135931 601781261
27	67	15.4	936	11	BF164906	BF164906 601778137
28	67	15.4	997	11	BI107100	BI107100 602894523
29	66	15.2	748	11	BG963884	BG963884 602828572
30	57	13.1	698	11	BI109045	BI109045 602896878
31	57	13.1	849	11	BF583521	BF583521 602101553
32	56	12.9	626	11	BF582283	BF582283 602101109
33	56	12.9	678	11	BG962941	BG962941 602827925
34	56	12.9	705	11	BG967208	BG967208 602833891
35	56	12.9	708	10	BE309445	BE309445 601095331
36	56	12.9	713	11	BI113389	BI113389 602900996
37	56	12.9	721	11	BG967689	BG967689 602833496
38	56	12.9	725	11	BF580940	BF580940 602100636
39	56	12.9	766	11	BG967034	BG967034 602834270
40	56	12.9	823	11	BF580331	BF580331 602097072
41	56	12.9	850	11	BG966217	BG966217 602830177
42	56	12.9	905	11	BF580037	BF580037 602095235
43	56	12.9	922	11	BF584560	BF584560 602098269
44	56	12.9	925	11	BG963141	BG963141 602828165
45	56	12.9	950	11	BF781701	BF781701 602104224

ALIGNMENTS

RESULT 1
BE309592
LOCUS 594 bp mRNA
DEFINITION 601094848F1 NCI_CGAP_Mam5 Mus musculus cdna clone IMAGE:3489635 5', mRNA sequence.
ACCESSION BE309592.1 GI:9166025
VERSION
KEYWORDS
SOURCE
ORGANISM
house mouse.
Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mus.
REFERENCE
1 (bases 1 to 594)
NIH-MGC <http://mgc.nci.nih.gov/>.
TITLE National Institutes of Health, Mammalian Gene Collection (MGC)
JOURNAL Unpublished (1999)
COMMENT Contact: Robert Strausberg, Ph.D.
Email: cgabs-remail.nih.gov
Tissue Procurement: Lochar Hennighausen Ph.D., Robin Humphreys
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LNL at:
<http://image.llnl.gov>
Plate: L14W8530 row: 0 column: 12
High quality sequence stop: 591.
location/Qualifiers
1. 594
/organism="Mus musculus"
/strain="C57/B6"
/db_xref="taxon:10090"
/clone="IMAGE:3489635"
/clone_id="NCI_CGAP_Mam5"
/tissue_type="tumor, gross tissue"

FEATURES

source

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/dev_stage="7 months"
/lab_host="DH10B"
/Note="Organ: mammary; Vector: pCMV-SPORT6; Site.1: SalI;
Site.2: NotI; Cloned unidirectionally. Primer: Oligo dT.
Library constructed by Life Technologies. Investigators
providing samples: Lothar Hennighausen/Robin Humphreys,
NIH"
BASE COUNT      158 a      149 c      143 g      144 t
ORIGIN
Query Match      20.0%; Score 87; DB 10; Length 594;
Best Local Similarity 100.0%; Pred. No. 5.8e-35;
Matches 87; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 340 TCTCCGTACACGTTGAGGGGGGAGGACCAAGCTGGAATAAAGCGGCTGATGTCGACCA 399
|||||
DB 326 TCTCCGTACACGTTGAGGGGGGAGGACCAAGCTGGAATAAAGCGGCTGATGTCGACCA 385
|||||
QY 400 ACTGATCCATCTTCCACCATCCAGT 426
|||||
DB 386 ACTGATCCATCTTCCACCATCCAGT 412
|||||

RESULT 2
BG963055      725 bp      mRNA      EST      12-JUN-2001
LOCUS      602828068F1 NCI_CGAP_Co24 Mus musculus cDNA clone IMAGE:4982825 5',
DEFINITION      mRNA sequence.
ACCESSION      BG963055
VERSION      BG963055.1 GI:14350692
KEYWORDS      EST.
SOURCE      house mouse.
ORGANISM      Mus musculus.
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sclurognathi; Muridae; Mus.
REFERENCE      1 (bases 1 to 725)
AUTHORS      NIH-MGC http://mgc.nci.nih.gov/.
TITLE      National Institutes of Health, Mammalian Gene Collection (MGC)
JOURNAL      Unpublished (1999)
COMMENT      Contact: Robert Strausberg, Ph.D.
Email: cgapbs-remail.nih.gov
Tissue Procurement: Jeffrey E. Green, M.D.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: L1AM10986 row: g column: 18
High quality sequence stop: 719.
Location/Qualifiers
1.725
/organism="Mus musculus"
/strain="FVB/N"
/db_xref="taxon:10090"
/clone="IMAGE:4982825"
/clone_lib="NCI_CGAP_Co24"
/lab_host="DH10B (T1 phage-resistant)"
/Note="Organ: colon; Vector: pCMV-SPORT6; Site.1: NotI;
Site.2: SalI; Cloned unidirectionally. Primer: Oligo dT.
Average insert size 1.6 kb. Constructed by Life
Technologies. Note: this is a NCI_CGAP Library."
BASE COUNT      195 a      182 c      174 g      174 t
ORIGIN
Query Match      19.5%; Score 85; DB 11; Length 725;
Best Local Similarity 100.0%; Pred. No. 6.6e-34;
Matches 85; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 342 TCCGTACACGTTGAGGGGGGAGGACCAAGCTGGAATAAAGCGGCTGATGTCGACCAAC 401
|||||
DB 353 TCCGTACACGTTGAGGGGGGAGGACCAAGCTGGAATAAAGCGGCTGATGTCGACCAAC 412
|||||
QY 402 TGTATCCATCTTCCACCATCCAGT 426
|||||
DB 413 TGTATCCATCTTCCACCATCCAGT 437
|||||

RESULT 4
BF785914      906 bp      mRNA      EST      12-JAN-2001
LOCUS      602112548F1 NCI_CGAP_Kid14 Mus musculus cDNA clone IMAGE:4240762
DEFINITION      5', mRNA sequence.
ACCESSION      BF785914
VERSION      BF785914.1 GI:12090950
KEYWORDS      EST.
SOURCE      house mouse.
ORGANISM      Mus musculus.
```

```
DB 372 TCCGTACACGTTGAGGGGGGAGGACCAAGCTGGAATAAAGCGGCTGATGTCGACCAAC 431
QY 402 TGTATCCATCTTCCACCATCCAGT 426
|||||
DB 432 TGTATCCATCTTCCACCATCCAGT 456
|||||

RESULT 3
BF579422      891 bp      mRNA      EST      12-DEC-2000
LOCUS      602093833F1 NCI_CGAP_Co24 Mus musculus cDNA clone IMAGE:4208144 5',
DEFINITION      mRNA sequence.
ACCESSION      BF579422
VERSION      BF579422.1 GI:11653134
KEYWORDS      EST.
SOURCE      house mouse.
ORGANISM      Mus musculus.
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sclurognathi; Muridae; Mus.
REFERENCE      1 (bases 1 to 891)
AUTHORS      NIH-MGC http://mgc.nci.nih.gov/.
TITLE      National Institutes of Health, Mammalian Gene Collection (MGC)
JOURNAL      Unpublished (1999)
COMMENT      Contact: Robert Strausberg, Ph.D.
Email: cgapbs-remail.nih.gov
Tissue Procurement: Jeffrey E. Green, M.D.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: L1AM9772 row: a column: 09
High quality sequence stop: 711.
Location/Qualifiers
1.891
/organism="Mus musculus"
/strain="FVB/N"
/db_xref="taxon:10090"
/clone="IMAGE:4208144"
/clone_lib="NCI_CGAP_Co24"
/lab_host="DH10B (T1 phage-resistant)"
/Note="Organ: colon; Vector: pCMV-SPORT6; Site.1: NotI;
Site.2: SalI; Cloned unidirectionally. Primer: Oligo dT.
Average insert size 1.6 kb. Constructed by Life
Technologies. Note: this is a NCI_CGAP Library."
BASE COUNT      246 a      226 c      204 g      215 t
ORIGIN
Query Match      19.5%; Score 85; DB 11; Length 891;
Best Local Similarity 100.0%; Pred. No. 6.7e-34;
Matches 85; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 342 TCCGTACACGTTGAGGGGGGAGGACCAAGCTGGAATAAAGCGGCTGATGTCGACCAAC 401
|||||
DB 353 TCCGTACACGTTGAGGGGGGAGGACCAAGCTGGAATAAAGCGGCTGATGTCGACCAAC 412
|||||
QY 402 TGTATCCATCTTCCACCATCCAGT 426
|||||
DB 413 TGTATCCATCTTCCACCATCCAGT 437
|||||

RESULT 4
BF785914      906 bp      mRNA      EST      12-JAN-2001
LOCUS      602112548F1 NCI_CGAP_Kid14 Mus musculus cDNA clone IMAGE:4240762
DEFINITION      5', mRNA sequence.
ACCESSION      BF785914
VERSION      BF785914.1 GI:12090950
KEYWORDS      EST.
SOURCE      house mouse.
ORGANISM      Mus musculus.
```

REFERENCE 1 (bases 1 to 906)
AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.
TITLE National Institutes of Health, Mammalian Gene Collection (MGC)
JOURNAL Unpublished (1999)
COMMENT Contact: Robert Strausberg, Ph.D.
Email: cgabs-remail.nih.gov
Tissue Procurement: Jeffrey E. Green, M.D.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LNL at:
<http://image.llnl.gov>
Plate: LAM985 row: P column: 11
High quality sequence stop: 718.

FEATURES
source 1. 906
location/Qualifiers
/organism="Mus musculus"
/strain="FVB/N"
/db_xref="taxon:10090"
/clone="IMAGE:4240762"
/clone_lib="NCI_CGAP_Kid14"
/lab_host="DH10B (T1 phage-resistant)"
/note="Organ: kidney; Vector: pCMV-SPORT6; Site_1: NotI; Site_2: SalI; Cloned unidirectionally. Primer: Oligo dT. Average insert size 1.75 kb. Constructed by Life Technologies. Note: this is a NCI_CGAP Library." 1"

BASE COUNT 243 a 232 c 237 g 194 t
ORIGIN

Query Match 19.5%; Score 85; DB 11; Length 906;
Best Local Similarity 100.0%; Pred. No. 6.7e-34;
Matches 85; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 342 TCCTACACGTTGGAGGGGACCAAGCTGGAATAAAGCGGCTGATGTCACCACT 401
|||||
Db 371 TCCTACACGTTGGAGGGGACCAAGCTGGAATAAAGCGGCTGATGTCACCACT 430
|||||

QY 402 TGTATCCATCTCCACCATCCACT 426
|||||
Db 431 TGTATCCATCTCCACCATCCACT 455
|||||

RESULT 5
BG961850 975 bp mRNA EST 12-JUN-2001
LOCUS 602826515F1 NCI_CGAP_Co24 Mus musculus cDNA clone IMAGE:4981443 5',
DEFINITION mRNA sequence.
ACCESSION BG961850
VERSION BG961850.1 GI:14349487
KEYWORDS EST.
SOURCE house mouse.
ORGANISM Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
1 (bases 1 to 975)
NIH-MGC <http://mgc.nci.nih.gov/>.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgabs-remail.nih.gov
Tissue Procurement: Jeffrey E. Green, M.D.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LNL at:
<http://image.llnl.gov>
Plate: LAM10982 row: n column: 04
High quality sequence stop: 743.

FEATURES
source 1. 975
location/Qualifiers
/organism="Mus musculus"
/strain="FVB/N"
/db_xref="taxon:10090"
/clone="IMAGE:4981443"
/clone_lib="NCI_CGAP_Co24"
/lab_host="DH10B (T1 phage-resistant)"
/note="Organ: colon; Vector: pCMV-SPORT6; Site_1: NotI; Site_2: SalI; Cloned unidirectionally. Primer: Oligo dT. Average insert size 1.6 kb. Constructed by Life Technologies. Note: this is a NCI_CGAP Library." 1"

BASE COUNT 288 a 264 c 210 g 213 t
ORIGIN

Query Match 19.3%; Score 84; DB 11; Length 975;
Best Local Similarity 100.0%; Pred. No. 2.3e-33;
Matches 84; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 343 CCGTACAGTTGGAGGGGACCAAGCTGGAATAAAGCGGCTGATGTCACCACT 402
|||||
Db 363 CCGTACAGTTGGAGGGGACCAAGCTGGAATAAAGCGGCTGATGTCACCACT 422
|||||

QY 403 GTATCCATCTCCACCATCCACT 426
|||||
Db 423 GTATCCATCTCCACCATCCACT 446
|||||

RESULT 6
BG965050 750 bp mRNA EST 12-JUN-2001
LOCUS 602829112F1 NCI_CGAP_Co24 Mus musculus cDNA clone IMAGE:4983962 5',
DEFINITION mRNA sequence.
ACCESSION BG965050
VERSION BG965050.1 GI:14352687
KEYWORDS EST.
SOURCE house mouse.
ORGANISM Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
1 (bases 1 to 750)
NIH-MGC <http://mgc.nci.nih.gov/>.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgabs-remail.nih.gov
Tissue Procurement: Jeffrey E. Green, M.D.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LNL at:
<http://image.llnl.gov>
Plate: LAM10989 row: g column: 03
High quality sequence stop: 748.

FEATURES
source 1. 750
location/Qualifiers
/organism="Mus musculus"
/strain="FVB/N"
/db_xref="taxon:10090"
/clone="IMAGE:4983962"
/clone_lib="NCI_CGAP_Co24"
/lab_host="DH10B (T1 phage-resistant)"
/note="Organ: colon; Vector: pCMV-SPORT6; Site_1: NotI; Site_2: SalI; Cloned unidirectionally. Primer: Oligo dT. Average insert size 1.6 kb. Constructed by Life Technologies. Note: this is a NCI_CGAP Library." 1"

BASE COUNT 202 a 193 c 181 g 174 t
ORIGIN

Query Match 19.1%; Score 83; DB 11; Length 750;

Best Local Similarity 100.0%; Pred. No. 7.5e-33;
Matches 83; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 344 CGTACACGTTGCGAGGGGACCAAGCTGGAATATAAAGGGCTGATGCTGCACCAACTG 403
|||||
DB 386 CCGTACACGTTGCGAGGGGACCAAGCTGGAATATAAAGGGCTGATGCTGCACCAACTG 445
|||||

OY 404 TATCCATCTTCCACCATCCAGT 426
|||||
DB 446 TATCCATCTTCCACCATCCAGT 468
|||||

RESULT 7
BF138788 630 bp mRNA EST 24-OCT-2000
LOCUS 601780387F1 NCI_CGAP_Lu30 Mus musculus cDNA clone IMAGE:408404 5',
DEFINITION mRNA sequence.
ACCESSION BF138788
VERSION BF138788.1 GI:10977828
KEYWORDS EST.
SOURCE house mouse.
ORGANISM Mus musculus.
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
REFERENCE NIH-MGC http://mgc.nci.nih.gov/
1 (bases 1 to 630)
AUTHORS National Institutes of Health, Mammalian Gene Collection (MGC)
TITLE Unpublished (1999)
JOURNAL
COMMENT Contact: Robert Strausberg, Ph.D.
Email: c9apbs-remail.nih.gov
Tissue Procurement: Gilbert Smith, Ph.D.
cDNA Library Preparation: Life Technologies, Inc.
DNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: NCI-CGAP clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LHAM9242 row: n column: 21
High quality sequence stop: 628.
Location/Qualifiers

FEATURES
Source 1..630
/organism="Mus musculus"
/strain="C57BL/6J"
/db_xref="taxon:10090"
/clone="IMAGE:408404"
/clone_lib="NCI_CGAP_Lu30"
/tissue_type="tumor, metastatic to mammary"
/lab_host="DH10B"
/note="Organ: Lung; Vector: pCMV-SPORT6; Site_1: NotI;
Site_2: SalI; transgenic model WNT-1, expression driven by
MMTV-LTR enhancer; Cloned unidirectionally. Primer: Oligo
dT. Library constructed by Life Technologies.
Investigator providing samples: Gilbert Smith, NIH"

BASE COUNT 162 a 158 c 150 g 160 t
ORIGIN

Query Match 18.6%; Score 81; DB 11; Length 630;
Best Local Similarity 100.0%; Pred. No. 8.4e-32;
Matches 81; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 225 TTCTGCTGCCCAAAAGGTCAGTGCAGTAGCTGCGATATATCTCTCACCAT 284
|||||
DB 221 TTCTGCTGCCCAAAAGGTCAGTGCAGTAGCTGCGATATATCTCTCACCAT 280
|||||

OY 285 CAGCAGCTTGAGTCTGAAGA 305
|||||
DB 281 CAGCAGCTTGAGTCTGAAGA 301
|||||

RESULT 8
BI250555 707 bp mRNA EST 17-JUL-2001
LOCUS

DEFINITION 602993614F1 NCI_CGAP_Mam5 Mus musculus cDNA clone IMAGE:5149563 5',
mRNA sequence.
ACCESSION BI250555
VERSION BI250555.1 GI:14799016
KEYWORDS EST.
SOURCE house mouse.
ORGANISM Mus musculus.
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
REFERENCE NIH-MGC http://mgc.nci.nih.gov/
1 (bases 1 to 707)
AUTHORS National Institutes of Health, Mammalian Gene Collection (MGC)
TITLE Unpublished (1999)
JOURNAL
COMMENT Contact: Robert Strausberg, Ph.D.
Email: c9apbs-remail.nih.gov
Tissue Procurement: Lothar Hennighausen Ph.D., Robin Humphreys
cDNA Library Preparation: Life Technologies, Inc.
DNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LHAM1369 row: k column: 04
High quality sequence stop: 707.
Location/Qualifiers

FEATURES
Source 1..707
/organism="Mus musculus"
/strain="C57/Bl6"
/db_xref="taxon:10090"
/clone="IMAGE:5149563"
/clone_lib="NCI_CGAP_Mam5"
/tissue_type="tumor, gross tissue"
/dev_stage="7 months"
/lab_host="DH10B"
/note="Organ: mammary; Vector: pCMV-SPORT6; Site_1: SalI;
Site_2: NotI; Cloned unidirectionally. Primer: Oligo dT.
Library constructed by Life Technologies. Investigators
providing samples: Lothar Hennighausen/Robin Humphreys,
NIH"

BASE COUNT 198 a 171 c 172 g 166 t
ORIGIN

Query Match 18.6%; Score 81; DB 11; Length 707;
Best Local Similarity 100.0%; Pred. No. 8.5e-32;
Matches 81; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 346 TACACGTTGCGAGGGGACCAAGCTGGAATATAAAGGGCTGATGCTGCACCAACTGA 405
|||||
DB 340 TACACGTTGCGAGGGGACCAAGCTGGAATATAAAGGGCTGATGCTGCACCAACTGA 399
|||||

OY 406 TCCATCTTCCACCATCCAGT 426
|||||
DB 400 TCCATCTTCCACCATCCAGT 420
|||||

RESULT 9
BI100311 712 bp mRNA EST 26-JUN-2001
LOCUS 602885776F1 NCI_CGAP_Kid14 Mus musculus cDNA clone IMAGE:5041194
DEFINITION 5', mRNA sequence.
ACCESSION BI100311
VERSION BI100311.1 GI:14551204
KEYWORDS EST.
SOURCE house mouse.
ORGANISM Mus musculus.
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
REFERENCE NIH-MGC http://mgc.nci.nih.gov/
1 (bases 1 to 712)
AUTHORS National Institutes of Health, Mammalian Gene Collection (MGC)
TITLE Unpublished (1999)
JOURNAL
COMMENT Contact: Robert Strausberg, Ph.D.

Email: cgabbs-remail.nih.gov
Tissue Procurement: Jeffrey E. Green, M.D.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LNL at:
http://image.llnl.gov

Plate: LLAM1113 row: g column: 19
High quality sequence stop: 680.

FEATURES

source

1. .712
Location/Qualifiers

/organism="Mus musculus"
/strain="FVB/N"
/db_xref="taxon:10090"
/clone="IMAGE:5041194"
/lab_host="NCL_CGAP_Kid14"
/note="Organ: Kidney; Vector: pCMV-SPORT6; Site:1; NotI;
Site:2; SalI; Cloned unidirectionally. Primer: Oligo dT.
Average insert size 1.75 kb. Constructed by Life
Technologies. Note: this is a NCL_CGAP Library."

BASE COUNT

201 a 199 c 152 g 160 t

ORIGIN

Query Match 18.2%; Score 79; DB 11; Length 712;
Best Local Similarity 100.0%; Pred. No. 9,7e-31;
Matches 79; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 348 CACGTCGAGGGGGGACCAAGCTGGAATTAACGGGCTGATCTGCACCACTGATC 407

Db 112 CAGCTTCGAGGGGGGACCAAGCTGGAATTAACGGGCTGATCTGCACCACTGATC 171

OY 408 CATCTCCACCATCCAGT 426

Db 172 CATCTCCACCATCCAGT 190

RESULT 10

LOCUS

BG964076 778 bp mRNA EST 12-JUN-2001

DEFINITION

60282830F1 NCL_CGAP_Co24 Mus musculus cDNA clone IMAGE:4983679 5',
mRNA sequence.

ACCESSION

BG964076

VERSION

BG964076.1 GI:14351713

KEYWORDS

EST.

SOURCE

house mouse.

ORGANISM

Mus musculus.

REFERENCE

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

AUTHORS

Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

TITLE

1 (bases 1 to 778)

JOURNAL

NIH-MGC http://mgc.ncl.nih.gov/.

COMMENT

National Institutes of Health, Mammalian Gene Collection (MGC)

UNPUBLISHED (1999)

Contact: Robert Strausberg, Ph.D.

Email: cgabbs-remail.nih.gov

Tissue Procurement: Jeffrey E. Green, M.D.

cDNA Library Preparation: Life Technologies, Inc.

cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LNL)

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can be

found through the I.M.A.G.E. Consortium/LNL at:

http://image.llnl.gov

Plate: LLAM1098 row: k column: 08

High quality sequence stop: 666.

Location/Qualifiers

1. .778

/organism="Mus musculus"

/strain="FVB/N"

/db_xref="taxon:10090"

/clone="IMAGE:4983679"

/lab_host="NCL_CGAP_Co24"

/note="Organ: Kidney; Vector: pCMV-SPORT6; Site:1; NotI;
Site:2; SalI; Cloned unidirectionally. Primer: Oligo dT.
Average insert size 1.75 kb. Constructed by Life
Technologies. Note: this is a NCL_CGAP Library."

/lab_host="DH10B (T1 phage-resistant)"
/note="Organ: colon; Vector: pCMV-SPORT6; Site:1; NotI;
Site:2; SalI; Cloned unidirectionally. Primer: Oligo dT.
Average insert size 1.6 kb. Constructed by Life
Technologies. Note: this is a NCL_CGAP Library."

BASE COUNT 244 a 202 c 171 g 161 t

ORIGIN

Query Match

18.2%; Score 79; DB 11; Length 778;

Best Local Similarity

100.0%; Pred. No. 9,7e-31;

Matches

79; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 348

CACGTCGAGGGGGGACCAAGCTGGAATTAACGGGCTGATCTGCACCACTGATC 407

Db 103

CACGTCGAGGGGGGACCAAGCTGGAATTAACGGGCTGATCTGCACCACTGATC 162

OY 408

CATCTCCACCATCCAGT 426

Db 163

CATCTCCACCATCCAGT 181

RESULT 11

LOCUS

BG968518 798 bp mRNA EST 12-JUN-2001

DEFINITION

602835104F1 NCL_CGAP_Co24 Mus musculus cDNA clone IMAGE:4989720 5',
mRNA sequence.

ACCESSION

BG968518

VERSION

BG968518.1 GI:14356142

KEYWORDS

EST.

SOURCE

house mouse.

ORGANISM

Mus musculus.

REFERENCE

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

AUTHORS

Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

TITLE

1 (bases 1 to 798)

JOURNAL

NIH-MGC http://mgc.ncl.nih.gov/.

COMMENT

National Institutes of Health, Mammalian Gene Collection (MGC)

UNPUBLISHED (1999)

Contact: Robert Strausberg, Ph.D.

Email: cgabbs-remail.nih.gov

Tissue Procurement: Jeffrey E. Green, M.D.

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DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can be

found through the I.M.A.G.E. Consortium/LNL at:

http://image.llnl.gov

Plate: LLAM1004 row: g column: 01

High quality sequence stop: 797.

Location/Qualifiers

1. .798

/organism="Mus musculus"

/strain="FVB/N"

/db_xref="taxon:10090"

/clone="IMAGE:4989720"

/lab_host="NCL_CGAP_Co24"

/note="Organ: colon; Vector: pCMV-SPORT6; Site:1; NotI;
Site:2; SalI; Cloned unidirectionally. Primer: Oligo dT.
Average insert size 1.6 kb. Constructed by Life
Technologies. Note: this is a NCL_CGAP Library."

BASE COUNT

225 a 222 c 179 g 172 t

ORIGIN

Query Match

18.2%; Score 79; DB 11; Length 798;

Best Local Similarity

100.0%; Pred. No. 9,7e-31;

Matches

79; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 348

CACGTCGAGGGGGGACCAAGCTGGAATTAACGGGCTGATCTGCACCACTGATC 407

Db 368

CACGTCGAGGGGGGACCAAGCTGGAATTAACGGGCTGATCTGCACCACTGATC 427

OY 408 CATCTCCACCATCCAGT 426
 Db 428 CATCTCCACCATCCAGT 446

RESULT 12

LOCUS BF687485 944 bp mRNA EST 22-DEC-2000
 DEFINITION 602102475F1 NCI_CGAP_Kid14 Mus musculus cDNA clone IMAGE:4220563
 5', mRNA sequence.
 ACCESSION BF687485
 VERSION BF687485.1 GI:11972893
 KEYWORDS EST.
 ORGANISM Mus musculus
 SOURCE house mouse.
 Mammalia; Eutheria; Chordata; Craniata; Vertebrata; Euteleostomi;
 Eukaryota; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

REFERENCE 1 (bases 1 to 944)
 AUTHORS NIH-MGC http://mgc.nci.nih.gov/
 TITLE National Institutes of Health, Mammalian Gene Collection (MGC)
 JOURNAL Unpublished (1999)
 COMMENT Contact: Robert Strausberg, Ph.D.
 Email: cgapbs-remail.nih.gov
 Tissue Procurement: Jeffrey E. Green, M.D.
 cDNA Library Preparation: Life Technologies, Inc.
 cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
 DNA Sequencing by: Incyte Genomics, Inc.
 Clone distribution: MGC clone distribution information can be
 found through the I.M.A.G.E. Consortium/LLNL at:
 http://image.llnl.gov
 Plate: LLM9804 row: f column: 20
 High quality sequence stop: 751.
 Location/Qualifiers

FEATURES

source

1..944
 /organism="Mus musculus"
 /strain="FVB/N"
 /db_xref="taxon:10090"
 /clone_image="IMAGE:4220563"
 /clone_lib="NCI_CGAP_Kid14"
 /lab_host="DH10B (TI phage-resistant)"
 /note="Organ: Kidney; Vector: PCMV-SpOrf6; Site_1: NotI;
 Site_2: SalI; Cloned unidirectionally. Primer: Oligo dT.
 Average insert size 1.75 kb. Constructed by Life
 Technologies. Note: this is a NCI_CGAP Library."

BASE COUNT	285 a	238 c	202 g	219 t
ORIGIN				

Query Match 17.2%; Score 75; DB 11; Length 944;
 Best Local Similarity 100.0%; Pred. No. 1.3e-28;
 Matches 75; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 352 TTCGAGGGGGGACCAAGCTGGAATTAACGGGCTGATGCTGCACCACTGATTCATC 411
 Db 238 TTCGAGGGGGGACCAAGCTGGAATTAACGGGCTGATGCTGCACCACTGATTCATC 297
 OY 412 TTCACCATCCAGT 426
 Db 298 TTCACCATCCAGT 312

RESULT 13

LOCUS BF687410 967 bp mRNA EST 22-DEC-2000
 DEFINITION 602102583F1 NCI_CGAP_Kid14 Mus musculus cDNA clone IMAGE:4220564
 5', mRNA sequence.
 ACCESSION BF687410
 VERSION BF687410.1 GI:11972818
 KEYWORDS EST.
 ORGANISM house mouse.
 Mus musculus
 Mammalia; Eutheria; Chordata; Craniata; Vertebrata; Euteleostomi;
 Eukaryota; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

REFERENCE 1 (bases 1 to 967)
 AUTHORS NIH-MGC http://mgc.nci.nih.gov/
 TITLE National Institutes of Health, Mammalian Gene Collection (MGC)
 JOURNAL Unpublished (1999)
 COMMENT Contact: Robert Strausberg, Ph.D.
 Email: cgapbs-remail.nih.gov
 Tissue Procurement: Jeffrey E. Green, M.D.
 cDNA Library Preparation: Life Technologies, Inc.
 cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
 DNA Sequencing by: Incyte Genomics, Inc.
 Clone distribution: MGC clone distribution information can be
 found through the I.M.A.G.E. Consortium/LLNL at:
 http://image.llnl.gov
 Plate: LLM9804 row: f column: 21
 High quality sequence stop: 577.
 Location/Qualifiers

FEATURES

source

1..967
 /organism="Mus musculus"
 /strain="FVB/N"
 /db_xref="taxon:10090"
 /clone_image="IMAGE:4220564"
 /clone_lib="NCI_CGAP_Kid14"
 /lab_host="DH10B (TI phage-resistant)"
 /note="Organ: Kidney; Vector: PCMV-SpOrf6; Site_1: NotI;
 Site_2: SalI; Cloned unidirectionally. Primer: Oligo dT.
 Average insert size 1.75 kb. Constructed by Life
 Technologies. Note: this is a NCI_CGAP Library."

BASE COUNT	313 a	231 c	201 g	222 t
ORIGIN				

Query Match 17.2%; Score 75; DB 11; Length 967;
 Best Local Similarity 100.0%; Pred. No. 1.3e-28;
 Matches 75; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 352 TTCGAGGGGGGACCAAGCTGGAATTAACGGGCTGATGCTGCACCACTGATTCATC 411
 Db 237 TTCGAGGGGGGACCAAGCTGGAATTAACGGGCTGATGCTGCACCACTGATTCATC 296
 OY 412 TTCACCATCCAGT 426
 Db 297 TTCACCATCCAGT 311

RESULT 14

LOCUS BG965736 793 bp mRNA EST 12-JUN-2001
 DEFINITION 602830592F1 NCI_CGAP_C024 Mus musculus cDNA clone IMAGE:4985159 5',
 mRNA sequence.
 ACCESSION BG965736
 VERSION BG965736.1 GI:14353373
 KEYWORDS EST.
 ORGANISM house mouse.
 Mus musculus
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

REFERENCE 1 (bases 1 to 793)
 AUTHORS NIH-MGC http://mgc.nci.nih.gov/
 TITLE National Institutes of Health, Mammalian Gene Collection (MGC)
 JOURNAL Unpublished (1999)
 COMMENT Contact: Robert Strausberg, Ph.D.
 Email: cgapbs-remail.nih.gov
 Tissue Procurement: Jeffrey E. Green, M.D.
 cDNA Library Preparation: Life Technologies, Inc.
 cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
 DNA Sequencing by: Incyte Genomics, Inc.
 Clone distribution: MGC clone distribution information can be
 found through the I.M.A.G.E. Consortium/LLNL at:
 http://image.llnl.gov
 Plate: LLM10992 row: h column: 24
 High quality sequence stop: 790.
 Location/Qualifiers

FEATURES

source

1..793

```
/organism="Mus musculus"
/strain="FVB/N"
/db_xref="taxon:10090"
/clone="IMAGE:4985159"
/clone_lib="NCI_CGAP_Co24"
/lab_host="DH10B (T1 phage-resistant)"
/note="Organ: colon; Vector: pCMV-SPOrt6; Site:1: NotI;
Site:2: SalI; Cloned unidirectionally. Primer: Oligo dr.
Average insert size 1.6 kb. Constructed by Life
Technologies. Note: this is a NCI_CGAP library."
BASE COUNT      210 a      236 c      169 g      178 t
ORIGIN
```

```
Query Match      16.8%; Score 73; DB 11; Length 793;
Best Local Similarity 100.0%; Pred. No. 1.4e-27;
Matches 73; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
OY 354 CGGAGGGGAGCCAGCTGGAATTAACGGGCTGATGTCACCACTGATCCATCTT 413
      |||||||
Db 284 CGGAGGGGAGCCAGCTGGAATTAACGGGCTGATGTCACCACTGATCCATCTT 343
OY 414 CGCACCATCCAGT 426
      |||||||
Db 344 CCCACCATCCAGT 356
```

RESULT 15

BI104783

```
LOCUS      BI104783      532 bp      mRNA      EST      26-JUN-2001
DEFINITION 602891329F1 NCI_CGAP_Lu29 Mus musculus cDNA clone IMAGE:5036622 5',
      mRNA sequence.
```

```
ACCESSION  BI104783
VERSION     BI104783.1 GI:14555676
```

KEYWORDS

EST.

SOURCE

house mouse.

Mus musculus.

house mouse.

Mus musculus.

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

REFERENCE

1 (bases 1 to 532)
Mammalia; Eutheria; Rodentia; Sciurognathu; Muridae; Murinae; Mus.

AUTHORS

NIH-MGC <http://mgc.nci.nih.gov/>.
National Institutes of Health, Mammalian Gene Collection (MGC)

TITLE

Unpublished (1999)

JOURNAL

Contact: Robert Strausberg, Ph.D.

COMMENT

Email: cgabbs-remail.nih.gov

Tissue Procurement: Gilbert Smith, Ph.D.

CDNA Library Preparation: Life Technologies, Inc.

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can be

found through the I.M.A.G.E. Consortium/LLNL at:

<http://image.llnl.gov>

plate: L1AM1101 row: 1 column: 07

High quality sequence stop: 532.

Location/Qualifiers

1..532

FEATURES

source

1..532

/organism="Mus musculus"

/strain="CZECCH II (feral)"

/db_xref="taxon:10090"

/clone="IMAGE:5036622"

/clone_lib="NCI_CGAP_Lu29"

/tissue_type="Spontaneous tumor, metastatic to mammary.

Stem cell origin."

/lab_host="DH10B"

/note="Organ: Lung; Vector: pCMV-SPOrt6; Site:1: SalI;

Library constructed by Life Technologies. Investigator

providing samples: Gilbert Smith, NIH"

BASE COUNT

139 a 148 c 113 g 132 t

ORIGIN

139 a 148 c 113 g 132 t

Query Match

15.4%; Score 67; DB 11; Length 532;

```
Best Local Similarity 100.0%; Pred. No. 2e-24;
Matches 67; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
OY 360 GGGGACCAAGCTGGAATTAACGGGCTGATGTCACCACTGATCCATCTTCCACC 419
      |||||||
Db 398 GGGGACCAAGCTGGAATTAACGGGCTGATGTCACCACTGATCCATCTTCCACC 457
OY 420 ATCCAGT 426
      |||||||
Db 458 ATCCAGT 464
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Search completed: February 21, 2002, 04:00:25
Job time: 26459 sec

